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ABSTRACT

This directory is one of five which together describe almost 1200 discretionary grants and contracts currently supported by the Research to Practice Division of the Office of Special Education Programs under the 1997 Amendments to the Individuals with Disabilities Education Act (IDEA). This document covers grants and contracts in the program area of Technology and Media Services. The program descriptions are grouped by the 17 competitions under which they were funded, such as Closed-Captioned Sports Programs, Video Description, Steppingstones of Technology Innovation for Students with Disabilities, Closed-Captioned Television Programs--Local News and Public Information, and Cultural Experiences for Deaf or Hard of Hearing Individuals. Provided for each project description is the following information: grant number; project title; name of project director; contact information (organization, address, phone number, Fax number, e-mail address); the project's purpose; the methodology; and proposed products. There are four indexes: a project director index, an organization index, a state index, and a subject index. (DB)

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ED 437 794

DISCRETIONARY PROJECTS SUPPORTED BY THE OFFICE OF SPECIAL EDUCATION PROGRAMS UNDER THE *INDIVIDUALS WITH DISABILITIES EDUCATION ACT*

FISCAL YEAR 1999

TECHNOLOGY AND MEDIA SERVICES

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U.S. DEPARTMENT OF EDUCATION
OFFICE OF SPECIAL EDUCATION PROGRAMS
RESEARCH TO PRACTICE DIVISION

EC307644

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DISCRETIONARY PROJECTS SUPPORTED BY
THE OFFICE OF SPECIAL EDUCATION PROGRAMS UNDER THE
INDIVIDUALS WITH DISABILITIES EDUCATION ACT

FISCAL YEAR 1999

TECHNOLOGY AND MEDIA SERVICES

PREPARED BY
RAY ORKWIS, JUDI DECARME, AND JEANNE GLOVER
THE ERIC/OSEP SPECIAL PROJECT
ERIC CLEARINGHOUSE ON DISABILITIES AND GIFTED EDUCATION
THE COUNCIL FOR EXCEPTIONAL CHILDREN

U.S. DEPARTMENT OF EDUCATION
OFFICE OF SPECIAL EDUCATION PROGRAMS
RESEARCH TO PRACTICE DIVISION

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TECHNOLOGY AND MEDIA SERVICES

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This directory, which is presented in five separately published sections, describes almost 1200 discretionary grants and contracts supported by the Research to Practice Division of the Office of Special Education Programs, which administers the discretionary programs authorized by the 1997 Amendments to the Individuals with Disabilities Education Act (IDEA). Some of the projects were funded under the provisions of the orignial IDEA, but for the purposes of this directory, they are grouped into five sections representing the seven program areas of the newly authorized IDEA, Part D:

1: **Research, Innovation and Evaluation** (which covers two programs: *Research and Innovation* and *Studies and Evaluations*)

2: **Personnel Preparation**

3: **Technical Assistance, Dissemination, and Parent Information** (which covers two programs: *Technical Assistance and Dissemination* and *Parent Training and Information*)

4: **Technology and Media Services**

5: **State Improvement**

This section of the directory, "Technology and Media Services," presents projects that aim to: (1) support educational media activities that are designed to be of educational value to children with disabilities; (2) provide video description, open captioning, or closed captioning of television programs, videos, or educational materials; (3) distribute captioned and described videos or educational materials; (4) provide free educational materials, including textbooks, in accessible media for visually impaired and print-disabled students in elementary, secondary, postsecondary, and graduate schools; and (5) provide cultural experiences through appropriate nonprofit organizations, such as the National Theatre of the Deaf.

Within this section of the directory, the projects are grouped under the competitions under which they were funded. Access to the project information is enhanced by several indexes, which include:

- Project Director Index
- Organization Index
- State Index
- Subject Index

(84.026A)
Closed-Captioned Sports Program

Grant Number: H026A970002

Provide Closed Captioning of Sports Events in Realtime

Project Director: Moore, Merle D.
Real-Time Captioning, Inc.
16031 Sherman Way
Van Nuys, CA 91406
818-376-0406

Beginning Date: 10/01/97
Ending Date: 9/30/00

Purpose: This project will continue Real-Time Captioning's (RT) closed captioning of major sports events and enable the hearing-impaired community to participate in and enjoy sporting events, providing educational, social, and cultural benefits.

Method: RT proposes to caption approximately 800 hours of sports events, using existing equipment, facilities, and personnel, and ensuring that the project will be cost effective.

Products: In addition to giving hearing-impaired people expanded closed captioning of sports events, this project will help increase the popularity of this service. As the popularity increases, so will public awareness and interest in the private sector for continuation of this service.

Grant Number: H026A970003

Closed Captioned Sports Programs

Project Director: Ferrier, Patricia
Media Captioning Services
2141 Palomar Airport Road, Suite 310
Carlsbad, CA 92009
619-431-2882

Beginning Date: 10/01/97
Ending Date: 9/30/00

Purpose: This project of Media Captioning Services (MCS) aims to provide stenographic realtime and live display captioning services of sports programming on the Cable News Network's (CNN) national news programming.

Method: This project builds on MCS's expertise in captioning sports and sports news over the past seven years. The sports programming to be captioned airs on CNN's national feed and includes added sports coverage from the news reporters of Sports Illustrated, providing the most comprehensive sports news service in television.

Products: This project will allow MCS to maintain its current level of captioning of 495 hours per year of CNN sports programming to allow 70 million homes access to daily and weekend sports closed captioned news.

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Grant Number: H026A970004

Closed Captioned Sports Programs

Project Director: Karlovits, Joseph R.
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317
412-514-4000

Beginning Date: 10/01/97
Ending Date: 1/30/00

Purpose: This project of VITAC, a major provider of captioning services, proposes to caption a variety of sports programs available to audiences on broadcast and basic-cable television.

Method: The project proposes to assure the quality captioning of over 3,400 hours of sports television programming over the three years of the grant. It will continue and expand the captioning of nationally televised programs which closely match preferences of the captioning audience. It will expand private-sector support for captioning by using federal funds as an inducement to increase funding support from program producers, and it will continue to seek input from the deaf community through its Caption Viewer Advisory Panel.

Products: The captioned programs developed by this project are virtually the only cultural experience which hearing and non-hearing members of the same family can share on equal footing. Through its use of private sector funding, the project will substantially increase the amount of captioned programming in a cost-effective manner, while the need for government funding decreases after the first program year.

Grant Number: H026A970005

Closed Captioned Sports Programs

Project Director: Karlovits, Joseph
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317
412-514-4000

Beginning Date: 10/01/97
Ending Date: 9/30/00

Purpose: This project by VITAC will caption a variety of sports programs available to audiences on broadcast and basic-cable television.

Method: VITAC will caption over 3,600 hours of sports television over the three-year grant period and will continue and expand its captioning of nationally televised programs which closely match the preferences of the captioning audience. It will expand private sector support for captioned programming and will continue to seek input from the Deaf community through its Caption Viewer Advisory Panel.

Products: Closed captioned television is the primary source of news, information, and entertainment for many people, and virtually the only cultural experience which hearing and non-hearing members of the same family can share on equal footing. This project will continue to provide this cultural service to the hearing- impaired community.

Grant Number: H026A970007

Closed Captioned National Sports Programming to Benefit the Nation's Deaf and Hard-of-Hearing Population

Project Director: Orphan, Dave
National Captioning Institute, Inc.
Office of the President
1900 Gallows Road, Suite 3000
Vienna, VA 22182
703-917-7623

Beginning Date: 10/01/97
Ending Date: 9/30/00

Purpose: With this project, the National Captioning Institute (NCI) assures the annual captioning of over 2,700 hours of nationally broadcast sports programming during the three years of the proposed project.

Method: Captions for programs will be provided verbatim using real- time captioning technology. NCI has developed private commitments to increase its efficiency and continue its work beyond the grant. NCI will continue its comprehensive, market-driven, firm fixed price approach for captioning all programs that are proposed.

Products: This project benefits not only people who are deaf or hard-of-hearing but also other groups, including children and adults with limited English proficiency, students learning to read, students with learning disabilities, and people for whom English is a second language.

(84.026C and 84.327C)
Video Description

Grant Number: H026C970002

Video Description: Narrative Television Network Broadcast and Cable

Project Director: Stovall, Jim
Narrative Television Network
5840 South Memorial Dr.
Tulsa, OK 74145
918-627-1000

Beginning Date: 10/01/97
Ending Date: 9/30/00

Purpose: This three-year project of the Narrative Television Network (NTN) will build upon its continuing services for blind and visually impaired children and adults by producing new television and movie programming as well as adapting pre-produced described programming to be delivered via home video.

Method: The project will produce and distribute accessible television and movie programming for home video use, using existing NTN personnel, studios, and programming agreements, as well as its affiliate base and ongoing base of operations.

Products: Videos will be made available for loan, rental, and purchase through video stores, libraries for the blind, groups and organizations that serve the visually impaired, NTN's lending library, and announcements on NTN's affiliate stations.

Grant Number: H026C970004

Descriptive Video Service: Describing Television Programs for Adults

Project Director: Joyce, Raymond
WGBH Educational Foundation
Descriptive Video Service
125 Western Ave.
Boston, MA 02134
617-492-2777

Beginning Date: 10/01/97
Ending Date: 9/30/00

Purpose: Through this project, WGBH's descriptive video service (DVS) will expand its programming to a national commercial network, while maintaining its presence on the Public Broadcasting Service, and a basic cable service, describing a minimum of 150 program hours for adults.

Method: Using focus groups, DVS will test its descriptions of network programming and classic movies. It will also seek corporate sponsorship to augment the grant-funded activities, thus expanding its outreach to blind and visually impaired persons. It will expand its campaign to educate the cable industry about the availability of described television programs (broadcast as well as on videotape) and to promote this service to cable audiences. It will encourage television producers to begin including video descriptions in their budgets.

Products: This project intends to increase the range of available described video programming for blind or visually impaired television audiences—directly, through its descriptive video service and indirectly, through its efforts to expand into commercial broadcasting.

Grant Number: H026C970005

Descriptive Video Service: Describing Educational and Popular Home Videos

Project Director: Joyce, Raymond
WGBH Educational Foundation
Descriptive Video Service
125 Western Ave.
Boston, MA 02134
617-492-2777

Beginning Date: 10/01/97
Ending Date: 9/30/00

Purpose: WGBH's Descriptive Video Service (DVS) intends to continue making movies and educational programs on home video accessible to blind or visually impaired persons.

Method: DVS will describe a minimum of 45 new home video titles and promote another 164 described videos. It will work to expand the availability of these titles to retail video rental outlets as well as through free-access locations such as public libraries and direct mail. The grant-funded activities will be supplemented through corporate sponsorship and private foundation support.

Products: DVS intends to expand its outreach to blind and visually impaired persons with materials in accessible formats. It will encourage producers in the home video industry to begin including video descriptions in the budgets of their films and it will work to incorporate video description into the new digital videodisc format.

Grant Number: H026C970007

Descriptive Video Service: Describing Television Programs for Children

Project Director: Joyce, Raymond
WGBH Educational Foundation
Descriptive Video Service
125 Western Ave.
Boston, MA 02134
617-492-2777

Beginning Date: 10/01/97
Ending Date: 9/30/00

Purpose: WGBH's Descriptive Video Service (DVS) intends to make public, cable, and commercial children's television programs accessible to blind or visually impaired persons. DVS will expand to a national commercial network, while maintaining its presence on the Public Broadcasting Service and on a cable service provider.

Method: Through this project, DVS will provide narrative descriptions for a minimum of 150 program hours for children. It will seek corporate sponsorship and private foundation support to supplement its grant-funded activities and it will encourage producers and funders of children's programming to begin including video description in their budgets. DVS will also encourage promotion of its services by cable providers.

Products: This project will help ensure that all children's programs described as a result of the grant will be made available through its home video service.

Grant Number: H327C980001

Video Description Projects Narrative Television Network Broadcast and Cable

Project Director: Stovall, Jim
Narrative Television Network
5840 South Memorial Drive Suite 312
Tulsa, OK 74145
918-627-1000

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: Narrative Television Network Broadcast & Cable (NTN) will continue to provide accessible television and movie programming to blind and visually impaired Americans and expand its service through its new relationship with The Family Channel.

Method: Programming selections will be made from the widest selection of movies as well as network and syndicated television programming, taking into acount the limited number of hours of accessible programming for children and adults with visual disabilities. NTN selects a broad cross-section of dramas, comedies, musicals, classical theatre, and other types of television and movie programming. NTN's industry experts will help to evaluate the digital technology which is being developed as well as new technologies currently being produced.

Products: During the three-year project period, NTN will produce 900 hours of accessible programming (300 hours per year). Outreach and dissemination will continue and be expanded during the three-year project period.

Grant Number: H327C980003

Expand Video Description on Cable Programming and Historic Public Television Events

Project Director: Joyce, Raymond
WGBH Educational Foundation
Descriptive Video Services
125 Western Avenue
Boston, MA 02134
617-492-2777

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The purpose of this project is for WGBH-TV's Descriptive Video Service (DVS) to make television programs and home videos accessible to blind and visually impaired audiences using video description.

Method: Blind and visually impaired audiences will be able to access the video descriptions by selecting the Second Audio Program (S.A.P.) which is standard on most stereo televisions and video cassette recorders (VCR). There is no charge for viewers to receive this service. For home video, the description is recorded onto a special version of the tape, thereby making it an openly described tape, playable on any VCR. No special equipment is required. Described home videos are sold at the same suggested retail price as the version without description. Program selection will be based on consumer feedback and reflect the audience need for diversity.

Products: This project will result in an increased number of hours of television programming that include video description for visually impaired viewers. DVS will promote the project by providing promotional materials in large print and Braille; maintaining an audio information system, accessible by a toll-free telephone number; developing a World Wide Web site; disseminating information about the service to organizations serving the target population including schools, agencies and membership organizations; and informing people at blindness

conventions, library conferences, and video stores. In addition DVS will ensure that captions from these programs are maintained for deaf and hard-of-hearing viewers. DVS will work with The Caption Center, another service of WGBH, on this effort.

(84.026D)
Educational Video Selection and Captioning

Grant Number: H026D970002

Solicitation, Screening, Evaluation, Procurement, and Captioning of Educational and Special Interest Videos

Project Director: Stark, Bill
National Association of the Deaf
814 Thayer Avenue
Silver Spring, MD 20910
864-585-1788
*Fax Number:*864-585-1791

*Beginning Date:*10/01/97
*Ending Date:*9/30/01

*Purpose:*The NAD will continue its program of screening, evaluating, captioning, and disseminating films and videos that provide enriched educational and cultural experiences for persons who are deaf and hard of hearing.

*Method:*The NAD will use its outreach program and capabilities in providing services for persons who are deaf and hard of hearing. Consumer input and careful monitoring of educational and technological innovations will permit the NAD to recommend appropriate adaptations to the Captioned Films/Videos (CFV) program to meet changing needs.

*Products:*This project is designed to generate increased usage of captioned titles made available through the CFV program and to meet the requirements of both changing needs and changing technologies as the CFV program advances into the next century.

(84.026E)
National Theatre of the Deaf

Grant Number: H026E970001

National Theatre of the Deaf Professional Training Program and Outreach

Project Director: Joslow, Jon
National Theatre of the Deaf
P.O. Box 659
Chester, CT 06412
860-526-4971

Beginning Date: 3/27/97
Ending Date: 3/26/00

Purpose: The National Theatre of the Deaf (NTD) proposes to conduct a series of programs that will provide for the development and broadening of the theatrical and general cultural range of the Deaf population in the United States. The NTD proposes to train Deaf and, on a limited basis, hearing actors and artists in a variety of theatrical production areas. The touring productions developed through such training will give the general population an increased awareness of the capabilities, skills, and artistry of the Deaf as well as an enhanced understanding and appreciation of deafness and Deaf culture. The training and the productions and projects developed as a result of such training are intended to promote cross-cultural understanding, help enable the Deaf and hearing populations explore ways to overcome communication barriers, and provide opportunities for the Deaf to participate in and contribute to society as a whole.

Method: The NTD will accomplish these goals through the implementation of the following: a professional training program in a variety of disciplines; the presentation of live performances for both adults and young people that will be performed in American Sign Language and the spoken word; outreach activities in education and the arts, including professional and technical assistance to regional and local cultural and educational programs; and the production of videotaped performances for distribution and, whenever possible, national and regional television broadcast.

Products: The NTD believes that there is inherent value in an established theatre company that develops and maintains a living language, ASL, as a unique art form. Live theatre, abetted by television, continues to be an important vehicle for breaking down the stereotypes that exist regarding minorities, in this case, those surrounding deafness and American Sign Language. With the efforts of the NTD under this project, hearing children and adults can be exposed to the artistry and professionalism of the Deaf, and Deaf children and adults throughout the U.S. can continue to have gifted actors as role models and as a source of pride and inspiration. The NTD is in a unique position to celebrate and disseminate ASL in this form and to explore the language as a teaching tool.

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(84.026R) Research on Educational Captioning

Grant Number: H026R970003

A Study of the Eye Movement Strategies Used in Viewing Captioned Television

Project Director: Jensema, Carl
Institute for Disabilities Research and Training
2424 University Boulevard, West
Silver Spring, MD 20902
301-942-4326

Beginning Date: 10/01/97
Ending Date: 9/30/00

Purpose: This project will conduct two studies to address the questions: 1) What eye movement strategies do people use in reading captioned television?, 2) How do these strategies vary with different people and different types of material?, and 3) Can people be taught to use more efficient eye movement strategies when reading captioned television?.

Method: The first two questions will be addressed by a survey of the eye movement strategies used by a sample of 200 people. The third question will be addressed by a controlled experiment to determine whether a computer program designed to teach efficient eye movement strategies can significantly improve captioned reading skills.

Products: Captioned television is a major source of educational material for people who are deaf or hard of hearing. With a better understanding of how people's eyes scan this material, ways could be developed to train people to read captioned television with maximum efficiency and increase their comprehension of the material, which would have a significant impact on the education of children who are deaf or hard of hearing. The results of this project will contribute to the knowledge base that will lead to these understandings.

Grant Number: H026R970008

Adaption of Captioning: Standards for Digital Video Technologies

Project Director: Hofmeister, Alan
Utah State University
Center for Persons with Disabilities
6800 Old Main Hill
Logan, UT 84322-6800
435-797-3718
Fax Number: 435-797-3887
E-mail: hofa@cc.usu.edu

Beginning Date: 10/01/97
Ending Date: 9/30/00

Purpose: This project will strive to make multimedia materials more accessible by adapting captioning standards for digital technologies. By captioning multimedia technologies, more opportunities are allowed for equal access training without special provisions being made that further segregate the hearing impaired. The National Association of the Deaf has been working with captioning service providers to develop preferred guidelines and styles for captioning.

Method: This project will explore methods of adapting captioning standards to existing multimedia programs for equal access to the hearing impaired. Digital technologies will be employed to address unresolved captioning problems such as captions that cover important information, inability to adjust font size, and pacing. These technologies can overcome these problems by providing captioning formats that can adapt to the learner's needs. When captioning is done in the onset ane not as an afterthought, it can be designed for use by all learners.

Products: This project will develop captioning standards for multimedia captioning and create a multimedia captionin handbook for dissemination, helping to increase equal access to the hearing impaired.

(84.327A)
Steppingstones of Technology Innovation for Students with Disabilities

Grant Number: H327A980007

Multiple Output Graphing Scientific Interactive Calculator

Project Director: Morford, Ronald A.
Automated Functions, Inc.
7700 Leesburg Pike, Suite 420
Falls Church, VA 22043
703-883-9797
Fax Number: 703-883-9798
E-mail: autofunc@tmn.com

Beginning Date: 9/01/98
Ending Date: 8/30/00

Purpose: The objective of the Multiple Output Graphing Scientific Interactive Calculator (MOGSIC) project is to design, develop, and test custom software in conjunction with economical hardware to enable visually impaired students to independently analyze graphs and perform scientific calculations.

Method: The MOGSIC project provides a set of tools that enable visually impaired students to perform functions similar to those done with commercial graphing scientific calculators. Specifically, they can perform scientific calculations, enter and edit math equations, and perform interactive graph analysis.

Products: MOGSIC will enable visually impaired students to equally compete with their sighted peers in math and science courses. This new technology will enable visually impaired students to succeed in math and science courses in high school and college, and will open the door for them to pursue and succeed in math and science careers.

Grant Number: H327A980011

A Software Tutorial for Learning the Nemeth Code of Braille Mathematics Notation for Use by Students Who Read Braille

Project Director: Kapperman, Gaylen
Research and Development Institute
P.O. Box 351
Sycamore, IL 60178
815-895-3078

Beginning Date: 10/01/98
Ending Date: 9/30/00

Purpose: The Software Tutorial for Learning the Nemeth Code of Braille Mathematics Notation for Use by Persons Who Are Blind is a tool by which severely visually disabled students can learn to read and write the braille symbols which comprise the braille mathematics code on an independent basis. Research indicates that blind students, in general, experience great difficulty reaching levels of achievement commensurate with their abilities. It is suggested that one of the major reasons for this lack of achievement is their inability to read and write braille mathematics. Their teachers, generally, have little to no training in the Nemeth Code. As a consequence, teachers are not capable of providing high quality instruction in braille mathematics. The staff of the

Research and Development Institute will develop the software tutorial, in collaboration with Blazie Engineering, to be used by blind junior high and high school students to learn how to read and write braille mathematics notation.

Method: The tutorial will be developed to operate on the Braille Lite, a small portable computer which combines both synthetic speech and an electronic, refreshable braille display. Lessons will be presented to the learner both in speech and braille. The software will be designed in such a fashion that when mathematical expressions are displayed, the speech synthesizer will speak them, using technically accurate vocabulary. In that way, the learner will be able to hear the mathematical expressions spoken and to read their braille equivalents.

Products: This project will develop a tool to enable blind students to improve their mathematics achievement, in order to enable them to study technical fields.

Grant Number: H327A980020

The Visual Mathematics Project

Project Director: Jenkins, Kathleen
Washington Research Institute
150 Nickerson St., Suite 305
Seattle, WA 98109
206-285-9317

Beginning Date: 1/01/99
Ending Date: 12/31/00

Purpose: The Visualizing Mathematics Project (VMP) will address both the lack of sophisticated tools and the need for a conceptual focus for students with learning disabilities, by developing a series of computer-based, instructional modules for teaching common mathematical operations and topics. The overall framework of this project is to create an innovative and emerging technology within the parameters of the software development lifecycle that is suitable for field-based evaluation.

Method: Students and teachers will be able to access and play brief, computer graphic animations of basic computational operations (i.e., addition, subtraction, multiplication, division) and key math topics such as fractions, decimals, and geometry. The operations and topics covered will be drawn from the current literature on elementary and middle school mathematics and cross-referenced with the instructional intervention literature in special education. Each module will be designed to play for approximately two to three minutes, and will be accompanied by voice narration. Some modules will involve the use of pictorial demonstrations of operations and concepts. The pictorial demonstrations will include tiles or blocks, which are a consistent feature in the current mathematics literature. The VMP modules and problem sets will be usable in a variety of instructional environments. Students can play the modules on individual computers and special education teachers can use VMP modules in class for demonstrations. The project will also produce guides for teachers on how to use the modules with a variety of commercial mathematics curricula. This will enable teachers to use the modules in conjunction with specific lessons in their print curricula. Current Internet "browser" software (e.g. Netscape Navigator, Microsoft Explorer) will be the platform for playing these modules. Once they are downloaded from the Internet or loaded from diskettes, they can be played within a browser without any connection to the Internet.

Products: The project will produce a series of independent instructional modules for teaching mathematical operations and topics, visually and conceptually. The VMP modules are designed to address the contemporary mathematics research issue that procedural practice (i.e., hand practice on computational problems) should be conceptually guided. At any time users can download and print a small practice set of problems directly related to the operation or topic being demonstrated. The project staff will develop a user's guide for the VMP modules

with detailed examples of how teachers can incorporate VMP modules into daily instruction and with cross-references from the VMP modules to appropriate lessons in a wide range of commercially available mathematics curricula. The project staff will disseminate the modules nationally through linkages to software and curriculum companies such as Microsoft Corporation and the Everyday Learning Corporation. Both corporations have World Wide Web sites from which the modules will be disseminated free of charge.

Grant Number: H327A980023

The Cornerstones Project

Project Director: Goldberg, Larry
WGBH Educational Foundation
125 Western Avenue
Boston, MA 02134
617-492-2777
Fax Number: 617-782-2155
Website: www.wgbh.org/pages/ncam/cornerstones/aboutproject.html

Beginning Date: 11/01/98
Ending Date: 10/31/00

Purpose: The Cornerstones Project is a balanced technology-based approach to literacy development for children who are deaf and hard-of-hearing. The project's primary objective is to obtain evidence that the Cornerstones approach is feasible for improving literacy through building background knowledge, increasing word knowledge, and improving word recognition skills. The impact of Cornerstones in educating deaf and hard-of-hearing children is far-reaching, since the project intends to provide teachers nationwide with convenient and appropriate materials and lesson guides for improving literacy.

Method: The Cornerstones Project recognizes that children who are deaf and hard-of-hearing encounter tremendous difficulty using higher-order processing skills during reading and writing partly because they bring inadequate background knowledge to these tasks, which also affects their ability to learn meanings of words. They also have problems developing lower-order processing skills, partly because they have not learned adequate strategies for identifying new words. To be effective, literacy instruction must address all these skills through the use of appropriate and engaging materials. The project will take advantage of the WGBH Educational Foundation's educational materials produced for children, as well as WGBH's expertise in captioning. Several groups of experts will help refine the approach: content experts—three academics in the field of deafness and literacy, and three exemplary teachers of deaf and hard-of-hearing students; WGBH New Media Team—three members of WGBH's Interactive Projects division; Digital Delivery Experts— three staff members from technology divisions within WGBH; advisors—two additional academics in the field of deafness and literacy; and teacher focus groups. The technology that supports the Cornerstones approach is a multimedia library of motivating materials, centered on a collection of video stories, as well as lesson guides for teachers that focus on both higher-order and lower-order literacy processes.

Products: The library will be delivered to classroom computers (or computer/television hybrids) via the World Wide Web, digital television, or CD-ROM. A user-friendly interface will help teachers navigate and retrieve materials easily and effectively.

Grant Number: H327A980024

The Strategic Reader: Textbooks Today, Web Tomorrow

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Beginning Date: 9/01/98
*Ending Date:*8/31/00

*Purpose:*Current textbook materials and teaching practices typically fail to effectively provide individualizable support (or scaffolds) for students who need help in the areas of: pattern recognition that leads to content understanding, strategic approaches to learning, and engagement with materials. This project will rectify this deficiency by further developing and refining an existing software tool, the Ultimate Reader, so that it provides support not only for decoding and entry-level reading skills, but for higher-level comprehension and study skills within specific content domains. CAST will focus on secondary-level history as an example, with an enhanced digital version of a standard commercial textbook as the content. The goal of this project is to develop a software tool and instructional approach that will: 1) improve cognitive access for special needs students to mainstream high school content-area materials, and 2) support their learning and use of reading skills and study strategies.

*Method:*CAST intends to: 1) refine a technology-based tool that will scaffold students as they learn specific content area knowledge and skills from textbooks and the World Wide Web; 2) create features for that tool that will support students as they learn to identify patterns in the text, develop effective strategies, and learn to sustain motivation and effort; 3) develop modifications for digital textbooks and other material that support such learning; 4) develop supports for teachers in the use of the technology and associated instructional approach which tie instruction to local and national standards; and 5) establish guidelines for publishers for the preparation of textbooks. CAST will build on the commercially available software, ULTimate Reader for Windows, a text-to-speech tool that provides access to information for individuals who cannot read adequately by converting electronic text into audible words. The project will extend the Reader into the domain of reading strategies and study skills by developing new features and supports for learning, enhanced content area materials, and cutting edge instructional methods. The tool can be applied successfully to both digitized text content and Web-based information.

*Products:*This work is ultimately intended to increase the number of learners succeeding in content areas like history, the number of teachers providing effective technology-based instruction to diverse learners, and the number of publishers providing supportive, accessible content. In collaboration with a major educational publisher, the project staff will prepare enhanced electronic social studies textbook chapters. The enhanced content will help students recognize important patterns while learning social studies content, as well as reading and study skills. Project staff will develop instructional methods that teachers can use to make the most of the new capacities in this software. Finally, there will be a set of scaffolds and resources for publishers, software developers, and Web designers that will enable them to replicate easily the electronic "marking" and tool features to use in making cognitively accessible educational experiences.

Grant Number: H327A980025

Project STATUS (Student Technology Assessment through Unique Strategies)

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Beginning Date: 10/01/98
Ending Date: 9/30/00

Purpose: The objectives for Project STATUS are: 1) to create a rural access system of multidisciplinary assistive technology (AT) evaluations and technical assistance through the use of distance-based interactive video technologies; 2) to adapt distance-based interactive video technologies to perform AT assessments and provide technical assistance for educational purposes; 3) to develop instructional methods for teaching local school personnel how to facilitate implementation of the AT recommended through the distance-based assessment; 4) to demonstrate how interactive distance-based AT evaluation and technical assistance ultimately impact student participation in statewide assessment and accountability and improvement in overall educational performance.

Method: The strategy to be employed by Project STATUS to address rural access to multidisciplinary assistive technology evaluation and technical assistance from trained professionals is to use distance-based interactive technologies to conduct AT assessments and technical assistance. This effort will be achieved through: 1) using new state-of-the-art (mini-cam, video-conferencing) and Internet technologies to provide functional assistive technology assessments; 2) assisting school personnel in determining and implementing assistive technology devices and services; and 3) conducting professional development for school personnel. The project will capitalize on the technology system developed in conjunction with the Kentucky Education Reform Act to reach students across the Commonwealth.

Products: Project STATUS will provide children with disabilities better means of accessing technologies that will enable them to achieve outcomes expected of all students, such as greater independence and productivity. Professional development will be conducted through the Kentucky statewide telecommunications network (a compressed video-site based system) and a World Wide Web site.

Grant Number: H327A980030

Teaching Scientific Inquiry Skills to Orthopedically Impaired Students in Virtual Reality

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Beginning Date: 10/01/98
Ending Date: 9/30/00

Purpose: The primary goals of this project are: 1) to investigate the efficacy of virtual reality learning environments as a tool for enabling secondary students with severe orthopedic impairments to be educated in regular science education classes along with their nondisabled peers; 2) to identify the conditions and supports that must

be present to implement virtual reality learning environments in regular science classes; 3) to identify principles for effective virtual reality learning environments that ensure meaningful student participation and meet multiple instructional needs; 4) to validate that virtual reality learning environments ensure adequate student progress in regular classroom settings, and 5) to disseminate results of this research on the use of virtual reality learning environments in ways that maximize the impact of this innovative strategy on the education of students with severe orthopedic impairments. The vision of this project is that access to specialized computer-based materials such as virtual reality learning environments will help to minimize the negative effects of students' physical limitations and thereby foster greater participation in regular science class instruction.

Method: Virtual Reality (VR) is a newly emerging technology that can permit students with severe physical limitations to participate fully in science experiments and activities, thereby maximizing their potential to complete important scientific experiments and activities and maximizing their potential to learn important scientific concepts. This is accomplished by providing students with extremely realistic, three-dimensional computer- generated representations of real-world settings. In these settings the students can make observations and perform experiments using a standard joystick assembly. Moreover, all their tools, supplies, and devices are completely interactive, thereby minimizing the limitations normally imposed by the students' physical disabilities. In short, the virtual reality experiences will permit the "doing' which is so important in the acquisition of scientific knowledge. The Oregon Research Institute (ORI) Virtual Reality Lab is a fully equipped development facility that will work closely with science teachers at selected secondary schools to identify specific units within the existing curriculum from which students with severe orthopedic impairments are excluded due to their physical limitations. The technical staff at the ORI Virtual Reality Lab will then create three- dimensional scenarios to be implemented in science classrooms containing one or more students with severe orthopedic impairments.

Products: A technical report will be written at the end of the each year describing the project and summarizing the results of evaluation efforts up to that point. In addition, a manual for implementing the strategies found to be effective will be written, with special emphasis on guidelines for implementing the program in public schools.

Grant Number: H327A980035

Literacy Access Online

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Beginning Date: 10/01/98
Ending Date: 9/30/00

Purpose: The purpose of this project is to develop a universally accessible, Web-based literacy learning tool for students with disabilities, ages nine thru 14. Literacy Access Online will utilize best practices in basic literacy acquisition; incorporate existing and emerging assistive, Web-based, and instructional technologies; include direct instruction to enhance learner/teacher or learner/parent relationship-based interactions; integrate current, age appropriate, real life literacy experiences into student-centered learning activities; and apply the principles of universal design to provide access to all students with disabilities.

Method: Literacy Access Online will synthesize and organize the best in literacy instruction for all students, providing access for those with disabilities ranging from mild to severe. Researchers and experts in the field will provide oversight and direction to this effort. Accommodations and approaches will be offered that embrace individualization based upon the unique needs of the student. While primarily technology-driven, instructional techniques will incorporate and support volunteer and/or paid "literacy facilitators." This project has potential

for local, state, national, and international impact. Since the project is World Wide Web-based, any student or literacy facilitator with access to the World Wide Web has the potential to benefit from the use of the Literacy Access Online tool. The tool can be used at home for independent use, in the classroom for individual or group instruction, at a university for graduate literacy training as well as continued research and development, and as an individual tool for individuals with and without disabilities at many different reading and writing levels. Literacy Access Online will supplement existing reading programs and general education curriculum materials. The product has potential to be a powerful tool to adapt general education curriculum for individual student level and need.

Products: The project will result in a Web-based literacy learning tool that synthesizes and organizes the best in literacy instruction for all students and will be developed with input from parents, educators, students, and technology experts.

Grant Number: H327A980036

Project CONNECT: Cyberschool to Organize Knowledge through Networks to Enhance Content Teaching

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Beginning Date: 9/01/98
Ending Date: 8/31/00

Purpose: Project CONNECT (Cyberschool to Organize Knowledge via Networks to Enhance Content Teaching) is a collaborative research project with Eugene School District 4J and the University of Oregon. The project will design, implement, and field-test curriculum adaptations used within Cyberschool, an electronic network- based school that has been developed by the school district, and make them available for students with disabilities. A number of courses are offered in Cyberschool, all of them credit- bearing for use in graduating from high school with a diploma. The goal of this project is to understand if this technology is effective in working with students with disabilities and if so, what critical dimensions make it effective and feasible.

Method: The project activities will be centered around both a curriculum design perspective and an electronic platform, taking advantage of a well-developed Cyberschool infrastructure already in place in the district. The curriculum design component focuses on content teachers identifying and highlighting specific knowledge forms (concepts and principles) that will be adapted to model and guide students in their learning by using a variety of intellectual operations and critical thinking skills. All curriculum-instruction modifications are oriented toward problem solving outcomes that are aligned with the state-mandated Certificates of Initial and Advanced Mastery. This project's research is based on ensuring that students with disabilities are included in all of the educational reforms designed around these certificates, using electronic media to help deliver teachers' programs and enhance students' access. The project research is conducted using the Cyberschool to both deliver the redesigned curriculum and instruction and to embed assessment formats and outcomes so that teachers participating in the study can include students with learning disabilities. The project staff will compare the performance of students in this experimental treatment with their performance in units lacking the adaptations, using repeated measures in all studies. In the process of redesigning how instruction is planned and delivered for students with disabilities, teachers who already have courses developed for the World Wide Web will be recruited. Volunteers will be asked to help structure adaptations so students with disabilities can participate.

Products: The curriculum adaptations to be developed should have great implications for changing the way teachers establish and implement network courses, develop Individualized Educational Plans, grade students,

schedule classes and matriculate students. The curriculum adaptations will be World Wide Web-based, therefore the opportunity is available for immediate dissemination and widespread impact in all high schools in the nation. In addition to the project information available from the RCTP World Wide Web site, more detailed information concerning course offerings, descriptions, prerequisites, and registration is available directly from the CyberSchool website. This site is not static, but offers an interactive environment where students, teachers, counciłors, and others can dialog about course content, instructional and assessment methods, modifications, and accommodation available to students with special needs, or other relevant subjects. Training modules will also be prepared as a vehicle for dispersing the project's information. The University of Oregon's Research, Consultation, and Teaching Program (RCTP) provides the opportunity for the project to publish its findings in a Research Report series.

Grant Number: H327A980040

Improving Access to the General Curriculum and Improved Literacy through Assistive Technology for Students with Expressive Communication Impairments

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Beginning Date: 10/01/98
Ending Date: 9/30/00

Purpose: The T.K. Martin Center for Technology and Disability and the Department of Education at Mississippi State University, in collaboration with the Mississippi Department of Education, will develop and validate an approach to the use of assistive technology to improve access to and participation in the general curriculum for students with disabilities. This model will provide a process for utilizing appropriate augmentative and alternative communication technologies, strategies, and techniques to enhance educational outcomes of students with disabilities in rural school environments that have little knowledge of or utilization of assistive technology for expressive communication.

Method: The project will develop a replicable district and individual school-level process for identifying appropriate expressive communication goals, selecting appropriate technology, and utilizing appropriate strategies and techniques for teaching expressive communication to individual students with utilization of assistive technology. Project objectives and activities will be directed at two major goals. The first goal is to validate the components that are specific to the development and implementation of a district and school-level assistive technology comprehensive plan for students with expressive communication impairments. The plan will use local "expert assistive technology intervention teams" to systematically train Local Education Agency (LEA) personnel to select appropriate goals and objectives for expressive communication, suitable assistive technology from a pre-established set of resources, and intervention strategies and techniques; provide ongoing technical assistance and resources to LEAs; and ensure that expert teams have adequate structures and resources to operate beyond the period of this project. The second goal is to validate strategies to facilitate the acquisition and generalization of a set of competencies to be demonstrated by teachers and service providers in order to improve literacy skills and increase access to the general curriculum for students with disabilities. The project will collaborate with the LEAs in the Starkville Municipal Separate School District, Tupelo Municipal Separate School District, Webster County School District, and West Point Municipal Separate School District in Mississippi. These districts represent both urban and rural districts within a predominantly rural state.

Products: The project will provide assistive technology to approximately 550 individuals with expressive communication impairments, and will intensively train 38 to 59 LEA personnel to effectively provide technology-based intervention to students within the general curriculum.

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Grant Number: H327A980044

Project INTERSECT: Internet Texts with Resources, Supportive Enhancements, and Comprehension Tools

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Beginning Date: 10/01/98
Ending Date: 9/30/00

Purpose: The inability of many students with disabilities to comprehend the text materials assigned by general education teachers has a negative impact on their literacy skills, their abilities to succeed in general education courses, and their abilities to perform successfully on tests reflecting local, state, or national curriculum standards. The goals of Project INTERSECT are to improve the literacy of secondary students with reading and/or learning disabilities, increase their success in the general education curriculum, and enhance their participation in educational reform through the creation and distribution of World Wide Web-based texts and textbooks specifically designed to meet their comprehension and information acquisition needs.

Method: To accomplish the goals of the project, Project INTERSECT has adopted the following four objectives: 1) to increase the effectiveness of on-line texts and textbooks for students with reading/learning disabilities; 2) to improve the efficiency by which on-line texts and textbooks are created, modified, and extended; 3) to improve the utility of on-line texts and textbooks by increasing the ability of teachers and students to integrate them into the curriculum and adopt them to meet specific circumstances and individual needs; and 4) to increase the availability of on-line texts and textbooks designed to support the comprehension and learning needs of secondary students with reading/learning disabilities.

Products: The major product resulting from Project INTERSECT will be a site on the World Wide Web that has three major components: 1) a "Digital Library" with 15-20 prototype texts and textbooks, designed specifically to provide secondary students with disabilities the supportive resources, text enhancements, and study tools they need for successful comprehension and learning; 2) an interactive "Instructional Center" with modules and materials designed specifically to assist students and teachers in using texts from the Digital Library; and 3) a "Development Center" that provides teachers and other curriculum developers with the tools and templates they need to modify and/or create additional Web-based texts compatible with the specifications of materials already in the "Digital Library."

Grant Number: H327A990023

How to Handle It: Problem Solving in Social Situations

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Beginning Date: 9/01/99
Ending Date: 8/31/01

Purpose: This project will develop interactive technology for individual or group use that will improve the social problem-solving skills of middle school students with disabilities. The computer software developed by the project will help students to experience scenarios in a non-threatening environment and provide them practice with metacognitive social problem solving prior to experiencing the situation in real life settings.

Method: The social problem-solving program, available on CD-ROM and in other formats, will provide individual students with an opportunity to view a video segment dramatizing a social situation. Students will select solutions to each situation and view a dramatization involving their chosen selection. The program will include definitions of the target skills, practice scenarios to demonstrate appropriate social problem solving, interactive problem solving vignettes to allow students to practice social problem solving, and an evaluation component designed to keep track of appropriate and inappropriate responses to student-selected solutions.

Products: Once developed, the technology will be piloted in three schools, where approximately 150 students and six teachers will participate in the two-month test. After evaluation, the software will be incorporated as a multimedia component into a more comprehensive social skills curriculum to be developed. The software will be disseminated first to all participating schools, and then to all Ohio University Partnership schools and Pittsburgh schools for use in their classrooms.

Grant Number: H327A990024

VESL: Visual Education for Scientific Literacy

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Beginning Date: 1/01/00
Ending Date: 12/31/01

Purpose: This project is a systematic study of how students interact with technology. It will collect information on the actual behavior exhibited by students with and without learning disabilities and other mild disabilities while they are learning via use of World Wide Web sites. The project will be a collaborative effort among faculty in special education, science education, systems engineering, and the physical and life sciences.

Method: The project will examine the links between actual behaviors while students are using the Websites and educationally relevant outcome measures such as recall and application of content material. The project

employs a sophisticated system for observing learner behaviors as represented by eye gaze data and will provide a clearer picture of what students actually do when presented with such displays as Websites.

Products: Once the characteristics of visual movement and digital display elements leading to recall/comprehension outcomes are determined, the next step will be the synthesis of information and development of model digital display documents which communicate science content and contain the elements determined to contribute to comprehension. From the study's conclusions, model Website applications will be developed for Website design which will enhance science comprehension for students with and without learning disabilities, K-12.

Grant Number: H327A990027

Evaluating the Use and Implementation of Anchored Instruction to Enhance the Literacy and Social Studies Skills of Mildly Disabled Learners

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Beginning Date: 9/01/99
Ending Date: 8/31/01

Purpose: To reduce the extensive academic and social difficulties of junior high school students with mild disabilities, an interdisciplinary team from Peabody College of Vanderbilt University and the University of Texas at Austin, with expertise in the areas of multimedia technology, curriculum development, literacy, social studies, and instructing adolescent students with mild disabilities, will evaluate an instructional system that incorporates instructional anchors and related curriculum that have been demonstrated to be powerful interventions in the areas of literacy and social studies. This project will provide teachers with the knowledge and skills to create and implement an academic environment that incorporates "life lessons" in ways that will enhance students' planning, survival behavior skills, employment skills, and citizenship skills by incorporating authentic problem situations into the subject-area curriculum through multimedia technology and the pedagogy of anchored instruction. This project uses knowledge gained from a previous Phase I project to test rigorously the effects of implementing the prior curriculum in ways that enhance teachers' understanding and impact their curriculum and, ultimately, student outcomes.

Method: The project will conduct the following activities: 1) rigorously field test, in eight classrooms in Nashville, Tennessee and Austin, Texas, anchored instructional interventions based on research findings from the areas of cognition and computer CD/ROM technology for students with mild disabilities; 2) provide teachers with the skills, knowledge, plans, and opportunities for reflection leading to curricular change and evaluate the fidelity of teachers' implementation of the instructional intervention and impact on student academic achievement and social behavior at the Nashville and Austin research sites; and 3) disseminate nationally via traditional and a World Wide Web-based information system the processes, products, and procedures that have been found most successful in enabling teachers working with students with mild disabilities in both general and special education settings to incorporate the technology and anchored instruction into their respective classrooms.

Products: Unique benefits of this research, development, and dissemination effort include: 1) national impact in improving teaching and learning in the targeted special education settings; and 2) the opportunity to rigorously test an instructional model and intervention that have been demonstrated to have high probability of success through a previously funded, pilot development effort.

Grant Number: H327A990029

Improving Spelling in Non-Speaking Children with Developmental Disabilities through VOCAs and Talking Word Processors

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Beginning Date: 7/01/99
Ending Date: 6/30/01

Purpose: This Phase II project is concerned with evaluating the role of communication technology in promoting literacy in non-speaking students with developmental disabilities. A promising technology-based approach involving an innovative combination of voice output communication aids (VOCAs) or talking word processors and the copy-cover-compare method of spelling instruction will be evaluated. Compared to nonelectronic communication boards, VOCAs provide additional speech and print feedback for each letter and/or word entered. Compared to typical word processors, talking word processors provide additional speech feedback.

Method: In order to enable this technology-based approach to maximize spelling improvement it is essential to determine the feedback conditions that result in more effective and efficient spelling acquisition, maintenance, and generalization. In Part I of the project, the project staff will compare the effects of three feedback modes (Speech, Print, Speech + Print) for each letter and word entered. In the Speech condition, the student can hear letters/words via synthetic speech. In the Print condition, the student can see each letter/word on a visual display. In the Speech + Print condition, the student can see and hear letters/words. In Part 2, the project will examine the effects of two feedback levels (Word, Letter + Word). With word-level feedback, the student receives feedback only after the whole word is entered. With Letter + Word feedback, the student receives feedback for each letter entered and each word entered. Six non-speaking students with autism and six non-speaking students with cerebral palsy will participate in Part 1. Six other non-speaking students with autism and six other students with cerebral palsy will participate in Part 2. The participants will be between nine and eleven years old and considered poor spellers. Novel words will be tested to evaluate generalization. Single-subject experimental designs (i.e., parallel treatment designs), replicated across students, will be used to evaluate the effects of feedback modes and feedback levels on spelling using five dependent measures. In addition to these objective data, the project will also determine the social significance of these outcomes as perceived by the participants' teachers/teacher aids, parents, and speech-language pathologists.

Products: This project will provide sound evidence as to what feedback modes and feedback levels maximize the effectiveness and efficiency of this technology-based approach in terms of spelling acquisition, maintenance, and generalization.

Grant Number: H327A990036

TELE-Web: Technology Enhanced Learning Environments on the Web

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Beginning Date: 8/16/99
Ending Date: 8/15/01

Purpose: The project's primary goal will be the description, modification, and evaluation of research-based literacy practices that have been incorporated into a technology application, Technology Enhanced Learning Environments on the Web (TELE-Web). TELE-Web is a suite of Internet-based software designed to accelerate and scaffold the literacy learning of students with disabilities in the core academic subjects (reading, writing, social studies, or science). TELE-Web offers multiple levels of support for teachers and students, including: 1) text-speech functions; 2) drawing functions; 3) a spelling program; 4) writing and publishing programs; 5) mapping functions; 6) software to promote the development of word recognition, phonemic awareness, and comprehension; and 7) book chat rooms. All of the TELE-Web environments can be customized for a specific child, literacy goal, or curriculum, enhancing its developmental appropriateness for different contexts and learners. This project will continue refining this Internet-based software through a contextually responsive process of curriculum development and implementation in collaboration with the project's school partners to ensure that activities are calibrated to the special and general education curriculum, as well as aligned to the age and developmental abilities of students, especially those with learning/behavioral disabilities, mental impairments, or developmental delays (LBD/DD).

Method: The participants implementing the TELE-Web curriculum will include eight general education teachers (four lower-elementary, four upper-elementary) and four resource room teachers, as well as their 160 general education students and 60 students with LBD/DD. A comparison group will be formed, and students in the two groups will be compared on a number of dependent variables, including their reading and writing performance, performance on standards-based assessments, social skills, and strategy knowledge/performance. Teachers will be contrasted on their use of technology, literacy practices, and effects of their curricular practices on students with LBD/DD. A longitudinal study will be conducted to determine the efficacy of the two conditions in terms of their potential to accelerate literacy achievement.

Products: TELE-Web can be easily and widely disseminated on the World Wide Web to teachers, students, researchers, and teacher educators in distant locations. By maintaining a Professional Development Network associated with TELE-Web, the project hopes to support the dual goals of providing professional development related to literacy and technology, as well as furthering project dissemination. Descriptions of the project, position papers, and research reports will be written. Publication will be pursued as well as presentation of findings at national and state conferences.

Grant Number: H327A990040

Effectiveness of the UKAT Functional Approach to Assistive Technology Service Delivery: Phase II

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Beginning Date: 7/01/99
Ending Date: 6/30/01

Purpose: The purpose of this Phase II Steppingstones project is to examine the effectiveness of implementing a functional approach to guide the delivery of assistive technology (AT) services in schools. The goal is to test the effectiveness of several AT planning and implementation tools that were developed and pilot tested in an urban school district under a previously funded federal grant. Those tools include: AT planning guidelines, an AT screening instrument, an AT consideration system, AT training materials, an AT World Wide Web-based support system, and procedures for evaluating the impact of AT services.

Method: The effectiveness of the AT tools will be evaluated and combined into a single, exportable package called the University of Kentucky Assistive Technology (UKAT) Toolkit. The UKAT Toolkit will be implemented in six urban and rural school districts to determine its effectiveness in addressing the assistive technology mandates of the Individuals with Disabilities Education Act. The UKAT Toolkit is based on a model of human function which focuses on identification of demands that are placed on an individual from the environment and the functional responses that are required to respond to those demands. Quantitative and qualitative research methods will be used to determine the effectiveness of the UKAT Toolkit in guiding the planning and delivery of AT services to students with disabilities in both urban and rural school settings.

Products: The UKAT Toolkit will be developed and will be suitable for further large scale validation via Phase III of Steppingstones.

Grant Number: H327A990041

Utilizing Technology to Remediate Auditory Processing Deficits: A Comparison of Three Programs

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Beginning Date: 8/01/99
Ending Date: 7/31/01

Purpose: The purpose of this project is to test the relative effectiveness and cost/benefits of three remedial programs when incorporated into a local school system's special education programming.

Method: Sixty students (ages 8-9) with phonological processing difficulties will be assigned to one of three

intervention groups: Lindamood LiPS, Fast ForWord, and Earobics. While phonological awareness is directly addressed by these interventions, it is essential that effective special education programming result in development of functional skills such as reading and language. Therefore, a baseline assessment of students will include measures of phonological awareness, reading, and language skills. Students will again be tested at one, eight, and twelve months post intervention. Data will be analyzed using ANOVA and a repeated measures design. Cost/benefits will also be analyzed for the three programs.

Products: During the second half of the project, staff will disseminate findings through conference presentations, the World Wide Web, and journal articles.

Grant Number: H327A990049

Project DEVISE: Designing Environments for Virtual Immersive Science Education

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Beginning Date: 7/01/99
Ending Date: 6/30/01

Purpose: This project will build immersive multi-sensory virtual learning environments that address the foundations of physics instruction for students with learning disabilities.

Method: The project will design and test prototype immersive virtual reality (VR) environments for high school students with learning disabilities. These learning environments will operate on Windows NT computers, which are affordable for and widely available in schools. The project will focus on two areas of science instruction: classical mechanics and electricity and magnetism. These two focus areas will be directly tied to current national and state standards of learning for science instruction.

Products: Three prototypes of direct instructional components of the virtual learning environments will be developed and field-tested by the project. An instructional model for the VR components will also be developed and tested. Ongoing learning from the project will be disseminated throughout the state of Virginia and integrated into statewide technical assistance activities. National impact will result from dissemination activities, including national, state, and local presentations, journal publications, and involvement with the Department of Education resource site.

Grant Number: H327A990050

Navigating Knowledge: Studying the Effectiveness of Integrating the Knowledge Navigator into an Active Research Curriculum

Project Director: Corley, Patricia
Education Development Center, Inc.
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Beginning Date: 1/01/00
Ending Date: 12/31/01

Purpose: This project will conduct a rigorous field-based research study to determine whether integrating the Knowledge Navigator, a software-based tool, into an active research curriculum through ongoing professional development has a positive impact on learning outcomes for middle school students and teachers.

Method: Seventh-grade social studies teachers will collaborate with researchers in designing, implementing, and reflecting on an active research curriculum that strategically integrates the Knowledge Navigator (the intervention). Researchers will employ a quasi-experimental design to evaluate the impact of this approach on learning outcomes among seventh-grade students with and without disabilities and their teachers. Teachers in the control condition will also engage in professional development and carry out an active research curriculum, though they will not utilize the Knowledge Navigator. The project will employ both qualitative and quantitative data-gathering strategies that include, for example, gathering student work at regularly identified intervals within the research process, interviewing teachers and students, making classroom observations, and tracking use of Knowledge Navigator. The project will also use linear growth modeling techniques to explore student and teacher growth throughout the process.

Products: This study will result in a better articulation of the benefits and limitations of the Knowledge Navigator software tool and development of a set of professional development materials to accompany the product.

Grant Number: H327A990057

Project PRIIDE: Providing Resources through Interactive Instruction in Deaf-Blind Education

Project Director: Alsop, Linda
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Beginning Date: 7/01/99
Ending Date: 6/30/01

Purpose: Project PRIIDE, under Phase I - Development Plan, will develop a technology-based approach for improving access to and participation in the general curriculum and other activities for children and youth who are deaf-blind. This technology-based approach will combine new technology, curriculum materials, and instructional methodologies that will support the achievement of education purposes of these children.

Method: For children and youth who are deaf-blind, access to the general curriculum and other activities is limited unless accommodations and modifications are made that will link them to the world. Project PRIIDE will address this need by developing an interactive program, using DVD (Digital Versatile Disc) technology, which can be used by teachers, related service providers, paraprofessionals, and families. It will be designed to guide the user through problem solving and decision making regarding accommodations and modifications that are appropriate in programs for these children and youth in various educational settings. DVD technology will allow this program to be used with DVD players or on a computer that can be linked to a World Wide Web site. Feasibility testing will be conducted in the states of Utah and Minnesota.

Products: This project will develop a DVD-based interactive program that will assist in making decisions about appropriate accommodations for children with deaf-blindness.

Grant Number: H327A990074

Project I LIKE: Improve Literacy by Interacting with Kitten and Elephant

Project Director: Dowrick, Peter; Kim-Rupnow, Weol Soon
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E-mail: dowrick@hawaii.edu

Beginning Date: 9/01/99
Ending Date: 8/31/01

Purpose: This project will develop and evaluate a multimedia-based package called I LIKE: Improve Literacy by Interacting with "Kitten" and "Elephant," who are animal friends that will guide and encourage learners in a multimedia reading environment, to improve literacy-related skills for elementary students with disabilities.

Method: This project is a collaboration among The Center on Disabilities Studies University Affiliated Program at the University of Hawaii, the University of Pennsylvania, and the Marshall Islands Department of Education. Major activities during the first year of this 2-year project will include: 1) developing the I LIKE package through extended pilot testing with students in elementary school; and 2) providing intensive training on the use of the I LIKE package to collaborating teachers and community members. This project will improve the student-to-tutor ratio by at least 300% with the addition of computer-assisted passage reading, sight word recognition, and phonemic skills. The key innovative feature is a program that can automatically create audio feedforward to teach reading skills and to boost the student's motivation and effort by listening to him/herself reading fluently. In the second year, a series of field tests by trained teachers and community members at three diverse schools will be conducted to evaluate and further improve the I LIKE package and its literacy outcomes for students with disabilities. Both qualitative and quantitative data will be collected on such dependent variables as: 1) students' reading skills of phonological awareness, decoding, word recognition, fluency, comprehension, motivation, and self-perceived competency; and 2) changes in teachers' and community members' knowledge and practices related to literacy incorporated as part of general classroom instruction. The project will also conduct case studies to investigate what media work best in what context and with what types of disabilities.

Products: The project will develop a multimedia literacy education package and training materials to explain its use. Package evaluation findings will be shared widely through the World Wide Web, replication packages, multimedia presentations, and journal articles.

Grant Number: H327A990078

ECCTS III: The Early Childhood Comprehensive Technology System

Project Director: Hutinger, Patricia L.; Johanson, Joyce
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Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: The major goals of this project are to: 1) disseminate information related to this project; 2) replicate and validate the original Early Childhood Comprehensive Technology System (ECCTS) II research findings in a range of typical rural and urban education settings; and 3) study implementation and maintenance of the project in replication sites. ECCTS III will study the effectiveness ECCTS II is likely to have in sustained use, focusing on factors related to children, families, professional staff, access to the regular curriculum, and policy.

Method: The major objectives of ECCTS III include tasks related to dissemination, replication, product development, and project management. Each objective incorporates data collection, analysis, and evaluation of tasks. Both quantitative and qualitative measures will be used for evaluation. Project staff will provide replication sites with ongoing staff development training and support for teachers, professional staff, and Technology Teams (Tech Teams). The on-site Tech Teams will be trained to provide continuing support and staff development at each site and will themselves receive continuing support from ECCTS III staff. Two groups of educational programs (Special Education Cooperatives and Joint Agreements, and other related agencies) will participate in partnerships with ECCTS staff: Group 1 will have five sites and Group 2 will have four sites. Group 1 sites will receive more on-site training from the ECCT III team than Group 2 sites, thereby providing a means to test conditions needed to establish and maintain ECCTS. Group 1 sites' activities will be modeled on the on-site tasks identified in ECCTS II during the collaborative research association between Kids). Group 2 sites' training will be modeled on an Outreach Replication model used successfully by Macomb Projects. Both Group 1 and 2 sites will receive continuous follow-up and support from the ECCTS III team because the research phase demonstrated the need for a long-term support period. Follow-up training and consultation will occur on-site as well as by e-mail, phone, videotape exchange, World Wide Web-site discussion, and return visits to the Macomb project site. During the third year, maintenance of the system will be supported and studied, with a maximum of two new Group 2 sites added.

Products: Dissemination activities will include traditional methods and media including face-to-face presentations, written materials, television, videotape, and strategies made possible by Web site and Internet capabilities. Target audiences will be identified so that efforts can be focused specifically at school boards, administrators, State Departments of Education, teachers, support staff, families, consumers, legislators, and others. A Web site home page will be developed and maintained. Product development will include a detailed blueprint for further dissemination and implementation of the system as well as videotapes and staff development modules targeted at the groups cited above.

Grant Number: H327A990081

Field-Testing & Validation of a Computer Assisted Testing Procedure for the Transition Competence Battery

Project Director: Bullis, Michael
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Beginning Date: 10/01/99
Ending Date: 9/30/01

Purpose: The purpose of this Phase II project is to: 1) field-test the CAT-TCB, a computerized assistive testing version of the Transition Competence Battery for Deaf Adolescents and Young Adults, and 2) establish its reliability and validity.

Method: An extensive field-testing of the CAT-TCB in order to establish the instrument's pyschometric characteristics, and three studies to examine its test-retest reliability and validity will be conducted. The CAT-TCB requires rigorous field-testing to address the following psychometric characteristics before it can be released for consumer use: 1) reliability with respect to item and test information functions; 2) test validity in terms of unidimensionality and item local independence along with concurrent and discriminant validity; 3) item and total test appropriateness/bias; and 4) optimal standards for test termination and test score interpretation. Score interpretation will depend on the validation of mastery cutscores — i.e., criteria that separate "skilled" from "unskilled" performers. The prototyped hardware/software configurations must be tested further, as the application reaches a broad range of user situations. Two related research questions will be addressed in this project: 1) what are the psychometric characteristics of the CAT-TCB?, and 2) what standards should be used on the CAT-TCB to guide transition planning and service delivery?.

Products: A psychometrically sound and useable CAT-TCB will provide information that ultimately will improve the transition outcomes of students who are deaf. Presentations will be made at professional conferences. Dissemination will occur to persons who are deaf, blind, and deaf-blind. Publications, technical reports, and a project newsletter will be produced.

Grant Number: H327A990082

Improving Literacy Outcomes Using Captioning Television and Parental Coviewing and Tutoring Strategies

Project Director: Linebarger, Deborah
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Beginning Date: 8/01/99
Ending Date: 7/31/01

Purpose: This Phase 2 Research and Evaluation project will adapt and refine the use of captioned programs to improve literacy for beginning readers, adapt and refine an instructional methodology for parents to use in their

homes while co-viewing captioned videos with their children, and evaluate captioned programs and parental co-viewing and tutoring strategies in combination.

Method: The project will address research questions related to the effect of captioned programs on improving literacy outcomes and reading skills. The project will build on past successes of captioning technology related to parental co-viewing and literacy outcomes. Knowledge of what criteria are important in program selection and what parental co-viewing and tutoring strategies work will contribute to the development of the field-based evaluation in Year 2. This evaluation, in turn, will provide evidence of the effectiveness of captioned programs and parental co-viewing and tutoring strategies for improving literacy for children who are deaf and hard of hearing, as well as two other groups: poor children and children with limited English proficiency—two groups at risk for, and more often identified with, disabilities such as learning disabilities, developmental delays, and language impairments.

Products: End products include evidence that captioned videos and parent co-viewing/tutoring strategies help poor children who are at-risk for or identified with reading difficulties and children who are learning English as a second language. Materials and procedures for parents and educators will outline the co-viewing approach and method of program selection.

Grant Number: H327A990100

Development and Refinement of Personal Caption Display System Using Continuous Speed-to-Caption Technology for Students Who Are Deaf

Project Director: Offner, Richard B.
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Beginning Date: 7/01/99
Ending Date: 6/30/01

Purpose: This project will develop and refine a personal caption display system that can be used in the classroom by students who are deaf or hard-of-hearing, and will test the feasibility of using speech recognition software to produce and display "real-time" captions of orally presented instruction.

Method: The project will work in partnership with MicroOptical Corporation of Boston, MA and Personal Captioning Systems, LLC, of Chicago, IL. The project will complete the development and refinement of an advanced prototype of the personal caption display (PCD) glasses that is suitable for use in the classroom by students who are deaf or hard-of-hearing. Testing will be completed on the application of commercially available continuous speech recognition software as a means for producing "real-time" captions of oral presentations in the classroom, such as teachers' lectures. The project will test the PCD system in the classroom with captions generated by computer as a means for deaf students to simultaneously receive a captioned version of the oral presentation while watching the speaker, enabling these students to participate more fully in the classroom.

Products: The PCD technology developed and refined by this project will address the problems of support for deaf students in general education classes. The availability of this technology will mean that deaf students will receive aural information on a nearly equal basis with hearing students. The PCD device will also lower the costs and labor needed for interpreting lectures and other orally presented materials.

(84.327B)
Readline

Grant Number: H327B980001

The Reading Project

Project Director: Gunther, Noel; Cortiell, Candace; Warger, Cynthia
GWETA, Inc.
2775 S. Quincy Street
Arlington, VA 22206
703-998-3290

Beginning Date: 1/01/99
Ending Date: 12/31/01

Purpose: WETA, the public broadcasting station in Washington, D.C., will develop "The Reading Project," which will disseminate research-based information on early diagnosis and effective strategies for teaching reading to children with disabilities who demonstrate difficulties learning to read. This project's hope is to reach parents, teachers, school administrators, tutors, day care providers, and the general public—anyone with an interest in helping children learn how to read.

Method: The Reading Project will launch an ambitious, media-based campaign to disseminate research-based findings to the widest possible audience. This project will be advised by nationally known experts in the field, such as Dr. Carol Sue Englert, Dr. Lynne Fuchs, Dr. Joseph Jenkins, Dr. Ed Kame'enui, Dr. Margo Mastropieri, Dr. Louisa C. Moats, Dr. Rollanda O'Connor, Dr. Anne Marie Palincsar, Dr. Louise Spear-Swerling, and Dr. Lee Swanson. The project has developed a comprehensive dissemination plan, working with partners such as the American Federation of Teachers, the American Association of School Administrators, the American Library Association, the Council for Exceptional Children, the International Reading Association, the National Association of Elementary School Principals, the National Association of State Directors of Special Education, the Urban Special Education Collaborative, and Zero to Three, among many others.

Products: The project's services will include: 1) a public television documentary offering information on early identification of children with language or reading problems and effective strategies for addressing those problems; 2) two videotapes explaining and demonstrating effective, research-based techniques for helping children learn to read; 3) a print guide designed for teachers and parents, which will include research-based strategies, exercises, and resources; 4) three teleconferences featuring top experts from around the country; and 5) an ambitious World Wide Web site, with in-depth information, research articles, bulletin board discussions, and "Ask the Expert," giving parents and teachers around the country the chance to speak with top researchers and master teachers. This Web site will build on WETA's successful experience operating LD OnLine (www.ldonline.org), an award-winning Web site on learning disabilities.

(84.327E)
Captioning Children's Educational Materials

Grant Number: H327E980001

Closed Captioning of the Series: The History Channel Classroom

Project Director: Duckler, Max
CaptionMax, Inc.
530 North Third Street #210
Minneapolis, MN 55401
612-341-3566

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: Under this project, CaptionMax, Inc., will provide quality off-line "pop-on" style captioning for "The History Channel Classroom," a popular non-commercial, educational program that airs nationally on the History Channel and is broadcast in classrooms across the country.

Method: CaptionMax will caption approximately 130 hours of educational programming per year for the History Channel series. This programming will enable all programs of "The History Channel Classroom" to be accessible to deaf and hard of hearing students and teachers.

Products: By providing captioning for the 130 hours of programming, this project will make educational programs that have never before been captioned accessible to deaf and hard of hearing students and teachers, a population of about five million individuals, and also to about six million viewers who use English as a second language.

Grant Number: H327E980002

Closed Captioning of the Series: "A&E in the Classroom"

Project Director: Duckler, Max
CaptionMax, Inc.
530 North Third Street#210
Minneapolis, MN 55401
612-341-3566

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project of CaptionMax Inc. will provide quality off- line "pop-on" style captioning for the non-commercial educational program on the Arts and Entertainment (A&E) Network known as "A&E Classroom."

Method: Employing ten captioners and six stations as part of the CaptionMax team, the project will provide closed captioning (via the use of off-line "pop-on" style captioning) to over 130 commercial-free, hour-long programs per year of the grant. All captioning is done within guidelines incorporating recommendations from the National Association of the Deaf's Captioned Films/Videos Program and from mini-studies done with a deaf consumer advisory board.

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Products: This project will enable all programs in the "A&E Classroom" series to become accessible to deaf and hard-of-hearing students and teachers.

Grant Number: H327E980007

Closed Captioned Educational Programming

Project Director: Karlovits, Joseph R.
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317
724-514-4040

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: Through this project, VITAC will caption a variety of educational programming available to national TV audiences and to schools to make it accessible to students who are deaf or hard of hearing.

Method: With a 12-year track record of captioning for live and prerecorded programs, VITAC will provide captioning to approximately 266 hours of televised educational programming over the three-year grant period, including nationally televised programs that are viewed by children in an educational setting. The project will work to expand private-sector support for captioned programming by using federal funds as an inducement to increase funding support from program producers, and it will continue to get input and guidance from the deaf community through its Viewer Advisory Panel.

Products: As a result of this project, over 152 half-hour programs and 51 quarter-hour programs of a comprehensive mix of nationally cablecast commercial-free educational television programming, will be captioned. All programming is approved and distributed by the Cable in the Classroom service that promotes in-school usage of TV programs.

Grant Number: H327E980008

Closed Captioned Educational Programming: The Noggin Channel

Project Director: Helminiak, Jeff; Orphan, David
National Captioning Institute, Inc.
1900 Gallows Rd. Suite 3000
Vienna, VA 22182
703-917-7600

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The primary goals of this project are to increase the availability of closed-captioned, noncommercial educational programming for children who are deaf or hard of hearing and to expand the variety of accessible educational programming available for use in the classroom. The National Captioning Institute (NCI), in cooperation with the Children's Television Workshop (CTW) and Nickelodeon, will complete closed captioning of 600 hours of educational programming for airing on "NOGGIN," CTW and Nickelodeon's newly formed 24-hour noncommercial educational cable television channel. "NOGGIN" combines CTW favorites such as "Sesame Street," "Electric Company," and "3-2-1 Contact" with Nickelodeon shows like "Blue's Clues" and "Nick News" to build a foundation of educational programming and to encourage kids and families to use their "noggin." The goal of "NOGGIN" is to "plug into children's natural curiosity, enthusiasm, and desire to learn."

Method: The project will work directly with CTW and Nickelodeon to caption programs that are slated to be aired on the new noncommercial "NOGGIN" channel. For each year of the three- year project, approximately

200 hours of programming will be captioned. In the first year, captioning resources will be divided among three CTW programs ("3-2-1 Contact," "Electric Company," and "Square One TV) and three Nickelodeon programs ("Gullah Gullah Island," "Wild Side," and "Make the Grade"). In years two and three, additional programs will be added to the program mix, including new original programs that CTW and Nickelodeon plan to produce for "NOGGIN" after its first year of operation.

Products: The project's primary product will be its 600 hours of closed-captioned educational programming for children.

Grant Number: H327E980009

Closed Captioned Educational Programming

Project Director: Kay, Lori; Becker, Sue; Apone, Tom
WGBH Educational Foundation
125 Western Avenue
Boston, MA 02134
617-492-9225

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project of the WGBH Educational Foundation will closed caption a variety of nationally distributed instructional television programs delivered through the National Educational Telecommunications Association (NETA) Educational Resources program. It will reflect program choices of educators, parents, and students and use the highest quality captioning standards and professional experience.

Method: The project will provide captioning of approximately 126 hours of educational programs each year of the grant. It will ensure a wide selection of programming available to over 26,000,000 students through NETA's Educational Resources affiliates at public television stations and through direct provision to participating school districts.

Products: In keeping with its mandate to serve all deaf and hard-of-hearing students, the project addresses a wide variety of educational programming, including math, science, English, health, social studies, history, fine arts, geography, vocational education, and other programming as appropriate.

Grant Number: H327E980010

Closed Captioned Educational Programming

Project Director: Kay, Lori; Becker, Sue; Apone, Tom
WGBH Educational Foundation
The Caption Center
125 Western Ave.
Boston, MA 02134
617-492-9225

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project of the WGBH Educational Foundation will add closed captioning to a variety of nationally distributed instructional television programs delivered through the Cable in the Classroom program. It will reflect program choices of educators, parents, and students and use the highest quality captioning standards and professional experience.

Method: The project will provide captioning of approximately 113 hours of educational programs each year of

the grant. It will ensure a wide selection of programming available to over 42,000,000 students through the Cable in the Classroom program, which has over 8,000 cable operators.

Products: In keeping with its mandate to serve all deaf and hard-of-hearing students, the project addresses a wide variety of educational programming, including math, science, English, health, social studies, history, fine arts, preschool skills, and other programming as appropriate.

(84.327F)
Closed-Captioned Spanish Television Programs

*Grant Number:*H327F990001

Provide Spanish Language Real-Time Captioning

*Project Director:*Hansel, Michael
Real-Time Captioning Institute, Inc.
16031 Sherman Way
Van Nuys, CA 91406
818-376-0406
*Fax Number:*818-376-0416
E-mail: RTC@MSN.COM

*Beginning Date:*10/01/99
*Ending Date:*9/30/02

Purpose: Real-Time Captioning, Inc. (RTC) will provide 400 hours of Spanish real-time captioning. This project will enable the Latino deaf and hard-of-hearing community to participate in and enjoy programming providing educational, social, and cultural benefits. This project will also benefit persons with reading deficiencies and those persons learning Spanish as a second language.

Method: The project will utilize existing equipment, facilities, and personnel to ensure cost-effectiveness. Examples of topics that will be addressed are: speed of captions, error rates, positioning of captions, and density of content.

Products: RTC will help create and maintain a bilingual Website serving as an immediate conduit between RTC and the community. Viewers will have direct access with staff to answer questions or concerns that they may have. The RTC board will receive monthly updates through the Website newsletter regarding issues discussed at the yearly meeting. RTC's bilingual monthly newsletter will cover topics of importance to the deaf and hard of hearing. It will serve as an open forum to discuss and improve Spanish-language captioning.

Grant Number: H327F990005

Closed Captioned Spanish Television Programs — CNN en Espanol

*Project Director:*Helminiak, Jeff
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703-917-7600
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*Beginning Date:*10/01/99
Ending Date: 9/30/02

Purpose: The National Captioning Institute (NCI), in collaboration with "CNN en Espanol," will complete closed captioning of more than 460 hours of Spanish-language television programs over a three-year period, in order to meet the diverse cultural and educational interests of Latin American deafa nd hard-of-hearing consumers. The two programs on "CNN en Espanol" selected for captioning ("El Mundo Informa" and "Enfoque") reflect programs that address the diverse interests of the Hispanic viewing audience for access to news and pub-

lic information.

Method: The project will work directly with "CNN en Espanol" to caption these two popular news and public information programs. The project will establish and support a consumer advisory group that will meet annually to provide feedback regarding the quality of captioning, and will deliver cost-effective captioning services that meet the highest quality captioning standards in the industry.

Products: "El Mundo Informa" is a half-hour weekly Spanish-language version of "CNN World Report," the world's largest television news exchange, providing an unedited forum for reports from broadcasters around the globe. "El Mundo Informa" is seen on "CNN en Espanol" several times throughout the week, in different time periods each day. "Enfoque" is a half-hour weekday program that explores a different topic Monday through Friday. Programming provides viewers with in-depth stories on topics of interest, with a timely wrap-up each weekend. The topics for each weekday include: 1) high fashion and style; 2) developments in science and technology, with an emphasis on achievements and contributions by Latin American scientists, inventors, and researchers; 3) the conflicts between people and nature; 4) the latest developments in medicine; and 5) exotic destinations around the world.

(84.327K)
Recorded Audio Cassettes for Visually and Print Disabled Students

Grant Number: H327K980002

Recorded Audio Cassettes for Visually and Print Disabled Students

Project Director: Geisel, Ritchie L.
Recording for the Blind and Dyslexic, Inc.
20 Roszel Road
Princeton, NJ 08540
609-520-8014

Beginning Date: 10/01/97
Ending Date: 9/30/00

Purpose: This project seeks to provide recorded audio cassettes for print disabled students at all educational levels by recording, producing, duplicating, and distributing four-track cassette versions of textbooks and other educational reading materials.

Method: Recording for the Blind and Dyslexic (RFB&D) will handle all requests for materials, arrange for copyrights from publishers of supplied textbooks, record or duplicate the books on one- hour cassettes, mail the cassettes on a free-loan, postage-paid basis, and handle all returned tapes and associated administrative and circulation functions.

Products: These cassette tapes will help provide equal educational opportunities to target students with visual and reading impairments and lessen some of the barriers they face in classrooms. By delivering the printed page to people who are blind, visually impaired, have a learning disability such as dyslexia, or who are unable to turn the pages of a standard textbook, RFB&D represents the critical difference between isolation and integration and between separation from and success in the classroom and the workplace.

(84.327L)
Closed-Captioned Television Programs -- Local News and Public Information

Grant Number: H327L990001

Closed Captioned Television Programs—Local News and Public Information

Project Director: Shedd, Tammie
Visual Audio Captioning
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Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: The project will provide start-up costs for real-time captioning for persons who are deaf or hard of hearing, in order to improve their quality of life by providing daily hours of captioned local, state, and national news. It will develop and implement strategies for ensuring equal access and treatment for eligible project participants who are members of traditionally underrepresented groups and it will train expert real-time captioners.

Method: This project will provide real-time captions for local news programming during the following hours: 12:00 p.m. to 12:30 p.m. Monday through Friday, 6:00 p.m. to 6:30 p.m. Monday through Sunday, 11:00 p.m. to 11:35 p.m. Monday through Friday, and 11:00 p.m. to 11:30 p.m. Saturday and Sunday. These captions will reach over a million households in the greater Cleveland, Ohio area.

Products: The news services captioned by this project will inform and help bring persons who are deaf or hard of hearing into the mainstream of society and serve as educational media to all other individuals who can benefit from closed captioning, including those who are learning English as a second language, who are learning literacy, or who have disabilities.

Grant Number: H327L990002

Closed Captioned Local News Programs WFTV-9 ABC

Project Director: Howell, William
Media Captioning Services
2141 Palomar Airport Rd., Suite 310
Carlsbad, CA 92009-1426
407-599-8314
Fax Number: 407-599-8318
E-mail: captionusa@aol.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will provide stenographic real-time and live display captioning for the ABC television affiliate in Orlando, Florida during the following hours: 12 noon-12:30 p.m. Monday-Friday and 5:00-6:30 p.m. Monday-Friday. The captioning of these broadcasts will begin real-time captioning of news in the central Florida market, providing captioning for deaf and hard-of-hearing viewers of live and critically important breaking

news.

Method: The project will form a consumer advisory group whose members will be selected from the deaf and hard of hearing community. This group will provide extensive feedback on such topics as caption placement, accuracy, use of color captions, and line length in assisting Media Captioning Services to provide the highest quality captioning.

Products: The mid-day and 5:00-6:30 newscasts captioned in this project will ensure that deaf and hard of hearing viewers of the number one TV station in Orlando will have real-time captioning of these important time blocks. WFTV9 serves an area encompassing over 2 million people, in one of the fastest growing areas of the country.

Grant Number: H327L990003

Closed Captioned Television Programs—Local News and Public Information

Project Director: Carter, Lorraine
Caption Reporters, Inc.
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Alexandria, VA 22314
703-683-2300
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E-mail: caption@earthlink.net

Beginning Date: 10/01/99
Ending Date: 10/01/02

Purpose: This project has two aims: to expand current levels of captioning to include local news programming, and to provide on-going training and mentoring of stenocaptioners.

Method: This project will caption five hours of local news weekly in Toledo, Ohio. On an annual basis, stenocaptioners will be trained and mentored in stress control, dictionary maintenance, new techniques, and new technologies.

Products: The project will provide increased exposure to news and local public information for the underserved deaf and hard of hearing community in the Toledo, Ohio area. The project will also result in more capable and professional stenocaptioners. They will be better able to cope with the high level of stress associated with captioning.

Grant Number: H327L990004

Real-Time Captioning of Local Broadcasting in the Four-State Area

Project Director: Mills, Steven
University of Kansas - Lawrence
Center for Research, Inc.
1052 Dole
Lawrence, KS 66045
316-421-6550
Fax Number: 316-421-6550
E-mail: smills@parsons.lsi.ukans.edu

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will provide real-time captioning for local news broadcasts and public affairs program-

ming for rural southeast Kansas and the four-corners area of Kansas, Missouri, Arkansas, and Oklahoma. This project addresses the needs of persons who are deaf or hard of hearing as well as individuals who are learning to read English as a second language.

Method: The project will be carried out through a cooperative agreement between the University of Kansas and KOAM-TV. The project will implement a telecommunications system that accommodates captioning of local television news broadcasts and public affairs programs and will provide real-time captioning for selected programming and off-line captioning of selected locally produced programming. It will develop a plan for on-going training to expand the base of local stenocaptioners and implement an evaluation process to monitor the operations of the project and the accuracy of the captioning services. The project will establish an advisory panel to provide on-going feedback regarding the quality of captioning services.

Products: The project will establish an on-going service delivery system to provide reliable and quality real-time captioning of news and other selected local programming of KOAM-TV that is of local interest to consumers who are deaf or hard of hearing.

Grant Number: H327L990006

Closed Captioned Local News Programming — Expand Realtime Captioning on KABC-TV Los Angeles

Project Director: Pyle, Nicole
Media Captioning Services
2141 Palomar Airport Rd., Suite 310
Carlsbad, CA 92009-1426
760-431-2882
Fax Number: 760-431-8735
E-mail: nicole@mediacaptioning.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will provide stenographic real-time and live display captioning for a local station in Los Angeles during the following time frames: 1) 5:30 a.m.-7:00 a.m. Monday-Friday and 2) 4:00-5:00 p.m. Monday-Friday. This project will enable deaf and hard-of-hearing viewers to have real-time captioning of all morning and evening KABC-TV newscasts.

Method: This project will meet the need to have sufficient stenocaptioning personnel in place who are familiar with local names and terminology and who can provide real-time captioning on an emergency basis to a high level of accuracy. The project will develop additional real-time stenocaptioning personnel who can caption programming on a regular basis and assist with emergency captioning when necessary.

Products: Viewers of KABC-TV will have all morning and evening newscasts real-time captioned, totaling 1,304 hours per annum of local news on this station .

Grant Number: H327L990008

Closed Captioned Television Programs

Project Director: Leonard, Charles
Closed Captioning Services, Inc.
2215 Oak Industrial Dr. NE, Suite 218
Grand Rapids, MI 49505-6037
616-456-6794
Fax Number: 616-458-6855
E-mail: CLOSEDCAP@GRNET.COM

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will work in close cooperation with a local television station in Grand Rapids, Michigan, to provide access for the deaf and hard-of-hearing audience to local news broadcasts in a viewing area of nearly 1 million households.

Method: The project will provide closed captioning of local news television programming and will provide deaf and hard-of-hearing viewers accessibility to these programs during the week and on weekends. The project will expand the closed captioning of approximately 520 hours per year of local news programs over the three-year period, and it will seek input from the deaf community through the project's consumer advisory board. It will increase private sector support for closed-captioned programming by using federal funds as an inducement for funding support from the station.

Products: The output of this project's regularly scheduled hours of captioned local news and public affairs programming each week on WOOD-TV will fulfill viewer demands for more captioned programming. The project intends to promote and publicize the closed-captioned news service in order to create greater awareness and expand the audience size.

Grant Number: H327L990009

Closed Captioning for Local News and Public Information

Project Director: Leonard, Charles
Closed Captioning Services, Inc.
2215 Oak Industrial Dr. NE, Suite 218
Grand Rapids, MI 49505-6037
616-456-6794
Fax Number: 616-458-6855
E-mail: CLOSEDCAP@GRNET.COM

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This company will work in close cooperation with a television station in Grand Rapids, Michigan to provide access for the deaf and hard of hearing audience to local news broadcasts in a viewing area of nearly 1 million households.

Method: The project will provide closed captioning of local news television programming and will provide deaf and hard-of-hearing viewers accessibility to these programs during the week and on weekends. It will expand the closed captioning of approximately 494 hours per year of local news programs over the three-year period. It will seek input from the deaf community through the project's consumer advisory board and increase private sector support for closed-captioned programming by using federal funds as an inducement for funding support from the station.

Products: The output of this project's regularly scheduled hours of captioned local news and public affairs programming each week will fulfill viewer demands for more captioned programming. The project will promote and publicize the closed-captioned news service to create greater awareness and expand the audience size.

Grant Number: H327L990012

Closed Captioned Television Programs — Local News and Public Information

Project Director: Shedd, Tammie
Visual Audio Captioning
9803 Sharon Court
Fairfax, VA 22032-1000
703-278-9110
Fax Number: 703-934-9139
E-mail: jshedd@radix.net

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will provide real-time captions for a local television station's 6:00 a.m. to 7:00 a.m. Monday through Friday newscast and another's 10:00 p.m. to 11:00 p.m. Monday through Sunday newscast. These captions will reach 1,172,000 households in the greater Cleveland, Ohio, area.

Method: This project will train personnel to become expert real-time captioners and it will improve the quality of life for the deaf and hard of hearing by providing daily hours of captioned local, state, and national news and public service announcements.

Products: The news services captioned by this project will inform and help bring persons who are deaf or hard of hearing into the mainstream of society and serve as educational media to all other individuals who can benefit from closed captioning, including those who are learning English as a second language, who are learning literacy, or who have disabilities.

Grant Number: H327L990013

Providing Real-Time Stenographic Captioning Services to KTUL in Tulsa, Oklahoma, and KCPT in Kansas City, Missouri/Kansas

Project Director: Schulman, Anne L.
Captioning Services for Kansas
1118 E. 1600 Road
P.O. Box 3593
Lawrence, KS 66046-0593
785-842-9994
Fax Number: 785-842-9993
E-mail: 103325.200@compuserve.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will train new real-time stenographic captioners and provide real-time stenographic captioning for news broadcasts on a Tulsa, Oklahoma, television station. The project will also provide real-time captioning for weekly public information programs in Kansas City, Missouri, and Kansas City, Kansas.

Method: Training will be developed for two court reporters to work as real-time stenographic captioners.

Captioners will provide real-time captioning services during the three years of the project to reach the more than 3,000,000 viewers in the combined markets of Oklahoma City and Kansas City, over 250,000 of whom are deaf or hard of hearing.

Products: The project will increase access to local community news for viewers who are deaf or hard of hearing, who are learning English as a second language, who are learning to read, or who are viewing in noisy environments. Access will be given to both daily news broadcasts and weekly public information programming.

Grant Number: H327L990017

Closed Captioned Local News and Public Information — WHEC-TV

Project Director: Merriam, William; Parker, Darlene
National Captioning Institute, Inc.
1900 Gallows Road, Suite 3000
Vienna, VA 22182-3865
703-917-7600
Fax Number: 703-917-9878
E-mail: orphan@ncicap.org

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: Through this project, the National Captioning Institute (NCI), in collaboration with WHEC-TV in Rochester, New York, will provide closed captioning of local news and public information programs over the three years of the project.

Method: This project will allow NCI to real-time caption three new local news programs on WHEC-TV, offering a full range of early morning, early evening, and late evening newscasts that are accessible to the area's deaf and hard-of-hearing population.

Products: The reach of the television station where the captioning will occur includes over 90,000 people in the Rochester, New York, area who are deaf or hard of hearing. By adding three new local news programs to the one that is already being real-time captioned on the station, a full range of daily newscasts will provide access to information for the deaf community, as well as for those who are learning English or have learning disabilities.

Grant Number: H327L990018

Closed-Captioned Local News and Public Information: WOKR-TV

Project Director: Merriam, William; Parker, Darlene
National Captioning Institute, Inc.
1900 Gallows Road, Suite 3000
Vienna, VA 22182-3865
703-917-7600
Fax Number: 703-917-9878
E-mail: orphan@ncicap.org

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: Through this project, the National Captioning Institute (NCI), in collaboration with WOKR-TV Rochester, New York, will provide closed captioning for local news and public information programs.

Method: The news programming to be captioned will include a weekday early morning news program, a prime time news show, an 11:00 p.m. news broadcast, and a regularly shown program on multicultural affairs and com-

munity events.

Products: The news shows being captioned are broadcast to an audience of over 1 million people in the Rochester area, with a population of over 90,000 deaf or hard-of-hearing individuals. The captioned shows will culturally benefit this community as well as those people who are learning to read, who are learning English, or who have learning disabilities.

Grant Number: H327L990019

Live Real-Time Captioning of News and Public Affairs Programming for the Pacific Northwest

Project Director: Gazeley, Carolyn
LNS Captioning
2130 SW Jefferson Street, Suite 200
Portland, OR 97201-7710
503-299-6200
Fax Number: 503-299-6839
E-mail: lnsinc@gstis.net

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will expand live, real-time captioning for news and public affairs programs in Oregon and expand the project staff's capacity to provide high-quality captions.

Method: The project will provide captions for the Portland, Oregon, city council, The City Club of Portland, a public broadcast program, and for KEZI, a local television station. Through its real-time captioning services, the project will increase access to news and information through television news broadcasts, expand the amount of information available to citizens regarding key issues of concern through captioning local government meetings and locally produced programs.

Products: The project will work with community leaders who have hearing impairments, to reflect their input and build new relationships with them and with the hearing-impaired community, giving them vital access to needed and otherwise inaccessible information. Benefits will also accrue to children and adults who need development with literacy and vocabulary and who are learning English.

Grant Number: H327L990020

Closed Captioned Television Programs: Local News and Public Information

Project Director: Shedd, Tammie
Visual Audio Captioning
9803 Sharon Court
Fairfax, VA 22032-1000
703-278-9110
Fax Number: 703-934-9139
E-mail: jshedd@radix.net

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will enable Visual Audio Captioning (VAC) to provide real-time captioning of area news programs broadcast on WOIO-TV in Cleveland, Ohio.

Method: VAC will collaborate with WOIO-TV in Cleveland, Ohio to provide real-time captions for the weekday afternoon and early evening news broadcasts and daily late-evening news programs, reaching over 1,172,000 households. The project will also train captioners to become expert real-time captioners.

Products: The news services captioned by this project will inform and help bring persons who are deaf or hard of hearing into the mainstream of society and serve as educational media to all other individuals who can benefit from closed captioning, including those who are learning English as a second language, who are learning literacy, or who have disabilities.

(84.327N)
Captioned Films and Video Distribution

Grant Number: H327N980001

Captioned Films and Videos Distribution

Project Director: Stark, Bill
National Association of the Deaf
814 Thayer Avenue
Silver Spring, MD 20910-4500
301-587-1788

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The goal of the Captioned Films/Videos (CFV) Distribution System and the CFV Educational Video Selection and Captioning activity, as mandated by PL 85-905 in 1958, is to provide "enriched educational and cultural experiences through which deaf persons can be brought into better touch with realities of their environment." To meet this critical goal, the National Association of the Deaf will: 1) develop a set of values, a vision, and an operational philosophy that provides guidance, effective communication, and clear direction to depository managers; 2) make management decisions and operational changes based on facts and valid data; 3) provide users with superior products and services that meet and exceed demands; 4) reach out to all eligible users of CFV and create greater satisfaction; and 5) make consumers an integral part of the improvement process. The underlying intent, within the constraints of available resources, is: 1) to provide equal access to cultural and educational opportunities that otherwise would be inaccessible to deaf and hard of hearing individuals and 2) to promote these opportunities through a cost-effective materials loan system.

Method: The project will maintain booking and circulation through a centralized computer booking system; institute "user registration and feedback" procedures to ensure that consumers are able to register as new users with ease and with quick confirmation response; maintain media repair and replacement; provide catalogs and lesson guides in three formats or versions: printed, CD-ROM, and Internet; conduct annual meetings to develop a vision that leads to a condition in captioning that is better than what now exists; and conduct "outreach" which is the marketing process of planning and executing the promotion of CFV products, goods, and services that satisfy consumer needs and CFV program objectives and to extend CFV services to a wider segment of the population including a focus on deaf and hard of hearing members of underserved and minority populations which include the U.S. Hispanic community, Asian Americans, African Americans, Americans over the age of 65, Native Americans, and Asian Pacific Americans. The project will increase services to public schools by identifying schools with deaf and hard of hearing students and providing program information; educating public school personnel about the special needs of their students who have a hearing loss; and educating school personnel about the benefits of using captioned materials. The project will also provide quarterly progress reports.

Products: The NAD will make the following products and information available to consumers. Open-captioned media collections of over 4,000 video titles will be circulated to registered clients through a distribution network, and multimedia offerings will begin. A CFV catalog will be developed annually, printed, and distributed to all clients. "Lesson Guides" will be printed and distributed for each new educational video. A CD-ROM version of the CFV catalog and lesson guides will be distributed. The CFV World Wide Web site will provide an electronic version of the CFV catalog, lesson guides for CFV educational videos, captioning informational and advocacy materials, online user registration capability, and electronic ordering of materials. The Captioning Database service on the CFV Web site will provide information to local school systems and others regarding the availability of open- and closed-captioned media from sources other than CFV.

(84.327R)
Recordings for the Blind

Grant Number: H327R980001

Accessible Formats for Educational Materials

Project Director: Kelly, John
Recording for the Blind and Dyslexic, Inc.
20 Roszel Road
Princeton, NJ 08540
609-520-8014

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project of Recording for the Blind and Dyslexic (RFB&D) will provide accessible formats of textbooks and other educational materials to print-disabled students (elementary, secondary, postsecondary, and graduate) by recording, producing, duplicating, and distributing accessible versions (analog and digital audio and digital text) of printed textbooks.

Method: RFB&D will handle requests for educational materials from students who are visually or print-disabled at all educational levels. It will coordinate and collaborate with publishers, software developers, other manufacturers of accessible materials for individuals who are visually impaired or otherwise print disabled, disability and educational organizations, and government agencies to ensure effective coordination and nonduplication of its efforts in the production of these materials. The project will use new technology, such as electronic text or digital audio synchronization, to produce and distribute the materials in accessible formats.

Products: RFB&D will record a minimum of 3,000 additional texts for use by print-disabled individuals and for inclusion in its 77,000 master tape library. It will also explore CD-ROM and network distribution of its materials. These tapes will be supplied on an on-loan basis to qualified individuals. It will disseminate its materials via catalogues and other publications, and at conferences and meetings. The materials are intended to help provide equal educational opportunities to print-disabled students and lessen some of the barriers they face in classrooms.

(84.327S)
Closed-Captioned Daytime Television Programs

Grant Number: H327S980002

Closed Captioned Daytime Television Programming

Project Director: Spellman, Jack
WGBH Educational Foundation
The Caption Center
125 Western Avenue
Boston, MA 02134
617-492-9225

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project will continue the success of the existing daytime programming closed-captioning cooperative agreement by ensuring that all programs currently captioned remain accessible. The project will also broaden the number of channels and the types of programs made accessible while reducing the overall rate per program hour.

Method: The Caption Center will reflect program choices of deaf and hard-of-hearing viewers, utilize the highest quality captioning standards and professional experience, provide captions on 606.5 hours of programs each year, and offer an extremely competitive rate. The project will ensure a wide selection of programming in syndication and on 11 cable networks including: Bravo, The Discovery Channel, Home & Garden Television (HGTV), The Learning Channel, Lifetime, MTV, Odyssey, Sci-Fi Channel, The Travel Channel, USA Network, VH-1, and programming syndicated by Hearst Entertainment and the American Program Service. Through this project, The Caption Center is addressing a constant need among caption consumers: the still serious lack of captioning available on cable. The Center's Consumer Council feedback will continue to address and improve captioning methodology, style, delivery, and promotion.

Products: The major product of this project is captioning of 606.5 hours of programs each year. Results from this project will be made available, openly and without proprietary protections, to all interested parties—through direct broadcast satellites, pay-per-view, fiber optics, and other delivery media. Project staff will make every effort to ensure that the captions created for the initial release of the program will be made available for second releases such as home video or other broadcast venue. Recommended practice documents, including information on emerging standards of Digital Television, will be made freely available through the project's publications: Caption Center News, TechFacts, and the Consumer Information Series. Other dissemination efforts include: mailings, the World Wide Web, regional and national committees serving several communities which benefit captioning, presentations at professional organizations, and local outreach efforts initiated by project staff.

Grant Number: H327S980004

Closed Captioned Daytime Television

Project Director: Karlovits, Joseph
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317
724-514-4040

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The purpose of this project is to assure the quality captioning televised daytime programming; to caption nationally televised programs which closely match preferences of the captioning audience; to expand private sector support for captioned programming by using federal funds as an inducement to increase funding support from program producers; and to continue to seek input from the deaf community through VITAC's Caption Viewer Advisory Panel.

Method: The project will provide the key elements in producing high-quality captions—appropriate staffing, advance research, quality-assurance procedures, state-of-the-art facilities, and refined captioning methods. VITAC will provide a minimum of 40% of captioned programming funding from producers and distributors and offers a three-year commitment of captioned programming funded by the private sector that represents 52% of the total hours. The project ensures that all daytime dramas currently captioned with support by federal funds will continue to be broadcast accessibly, such as "The Young And The Restless," "Days Of Our Lives," "The Bold And The Beautiful," "Sunset Beach," "Home Matters," "Men In Toolbelts," and "Next Door With Katie Brown." VITAC will expand captioned daytime programs to include a new offering from popular talk host Maury Povich. Universal Studios will agree to pay 40% of the captioning costs of the Povich program during the three-year project and it will be live encoded.

Products: The major product of this project will be captioning of approximately 3,939 hours of televised daytime programming over the three-year project period. To promote the project, VITAC publishes a quarterly newsletter called "Verbatim"; produces press announcements regularly carried in publications aimed at the deaf community and the television industry; obtains a media distribution list including more than 140 newspaper, magazine, television, and radio outlets across the country; and has a web site available to consumers (www.vitac.com) to inform the public of the programs captioned under this agreement.

Grant Number: H327S980008

Closed Captioned Daytime Programming Fox News Channel

Project Director: Ferrier, Patricia
Media Captioning Services
2141 Palomar Airport Rd Suite 310
Carlsbad, CA 92009
760-431-2882

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project will provide deaf and hard-of hearing viewers with captioned, live breaking news during daytime hours, by supplying stenographic realtime and live-display captioning services from Fox News Channel news programming.

Method: The project offers cost-effective, quality captioning which will be provided at a cost of $166.06 per hour for federal funding. Viewers of Fox News Channel, which reaches almost 29 million homes, will have captioning of Fox's programming, which features in-depth live news coverage of world events during key daytime

hours. Private sector contributions of $94,974 from Fox in year one and an additional $31,404 in year one from Media Captioning Services (MCS) represent a combined contribution equal to 26% of total project costs in year one to supplement federal funds.

Products: Continuous captioning will be provided from 9:00 a.m. to 5:00 p.m. weekdays, for a total of 2,080 weekday hours per annum. MCS will work with deaf organizations who have been supportive such as Self Help for Hard of Hearing People, Inc. (SHHH), A.G. Bell, and National Association of the Deaf (NAD) in disseminating information and providing feedback to MCS's consumer feedback consultant. MCS will make presentations at conventions; develop a World Wide Web site that will allow for customized quotations to be given to stations/video programmers for realtime captioning of their programming; and disseminate information about Captioning/Fox News Channel project activities though the Web page. Visitors to the Web site will be able to determine what events are being captioned on Fox News Channel and access live interviews with key decision makers, with links to Fox News Channel's home page to view a transcript and post guest comments.

Grant Number: H327S980009

Closed Captioned Daytime Programming

Project Director: Ferrier, Patricia
Media Captioning Services
2141 Palomar Airport Road Suite 310
Carlsbad, CA 92009
760-431-2882

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project will provide stenographic realtime and live display captioning services on CNN (Cable News Network) daytime news programming.

Method: Key features of this project include maintaining the captioning of 2,314 hours per annum of CNN's daytime programming, and expanding captioning by 130 additional weekend hours, for a total of 2,444 hours. Cost-effective, quality captioning will be provided at a cost of $142.81 per hour, 15% less than the previous cost of $168.71 to the federal government under the current daytime award and 38% less than the federal cost of $230.77 per hour six years ago. This project has obtained a combined private sector contribution equal to 20% of the total per annum project cost.

Products: Viewers of CNN, which reaches 74 million homes, will have captioning of 2,444 hours of CNN's daytime programming, featuring in-depth news coverage, live breaking news, and specialized daily reports on business, finance, medicine, and science. Media Captioning Services (MCS) will work with deaf organizations that have been supportive such as Self Help for Hard of Hearing People, Inc. (SHHH), A.G. Bell, and National Association of the Deaf (NAD) in disseminating information and providing feedback through the project's consumer feedback consultant. MCS will make presentations at conventions and will develop a World Wide Web page to allow for customized quotations to be given to stations/video programmers for realtime captioning of their programming. The Web site will provide capability for visitors to determine what events are being captioned on CNN, read summaries of significant events, view live interviews with key decision makers (with links to CNN's home page to view a transcript), and leave their comments on project captioning. Chat room capability will also be available.

(84.327T)
Cultural Experiences for Deaf and Hard of Hearing Individuals

Grant Number: H327T980004

The Impact of Theatrical Experiences on the Total Development of the Child Who Is Deaf or Hard of Hearing

Project Director: Scherer, Patricia
International Center on Deafness and the Arts
3444 Dundee Rd.
Northbrook, IL 60062
847-559-0110

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The purpose of this project is to provide training, knowledge, and skill development that will lead to enhancement of theatrical experiences irrespective of hearing status or cultural background. In addition, the project develops awareness and appreciation by the hearing public of artistic contributions to society by deaf and hard of hearing individuals.

Method: The following activities will be conducted over a three-year period: 1) an annual professional adult play with parts for children, such as "The Wizard of Oz"; 2) an annual children's play for children ages six years through high school; 3) a Participant Theatre, which presents a professional play, based on children's literature, that provides opportunities for children in the audience to participate and improvise and that provides learning packets (in English, Spanish, or braille) sent to target schools prior to the play; and 4) a series of workshops designed to teach children about American Sign Language and its artistic applications, as well as the artistic contributions to society by the deaf community. As a result of these activities, children are expected to receive: 1) training and role models in all aspects of theater by professional adults who are deaf, hard of hearing, and hearing; 2) development of cognitive, artistic, and social skills; and 3) knowledge of children's literature, American Sign Language, and its application to the arts as well as the process of appreciating and evaluating literature and the performing arts. Children and adults who are deaf and hard of hearing will participate in every aspect of the project. Children's play directors will be deaf and hard of hearing. The activities will occur in public, private, and residential schools in inner city and suburban areas, thereby providing the base for ethnic and cultural diversity. The Children's Theatre currently has African American, Asian, Indian, Hispanic, and Caucasian members.

Products: The primary products will be the plays, workshops, and learning materials. In addition, presentations will be given at state and national conferences to disseminate the results of this project.

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Grant Number: H327T980008

OPTICA: Our Path: Together Initiating Cultural Access

Project Director: Janes, Malisa W.
Illuminations...Theatre with the Deaf
1475 West Gray
Houston, TX 77019
713-529-8692

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The "Our Path: Together Initiating Culture Access" (OPTICA) program unites all adults and children with hearing loss in artistic expression and creates accommodations media for communicating cross-culturally. The program fosters cooperation and learning for both American Sign Language and Hard of Hearing people so that they can share their cultures as well as build teams to open doors to all arts/culture/heritage in the hearing community. "Total Accommodation" (interpreters, captioning, and assistive learning devices) is provided for every activity, and all populations with hearing loss are included so that they can learn more about each other and share in the experience and understanding of deaf culture. Total Accommodation products are created and disseminated by and for people with hearing loss to show the community how to provide complete access and to demonstrate their competency and creativity to the hearing community.

Method: The program has three developmental steps. The first step is to teach American Sign Language theatrical presentation to adults and children. Concurrently, there are classes in video filming to develop skills of adults and youth so that they can promote their events and culture. In addition, there will be a class for the non-actor in theater crafts (costuming, sets, lighting, etc.). The children's theater day camp, focusing on the arts, opens doors to the full diversity of children with hearing loss. Recreational activities are included, and a summer play climaxes the camp session. The children's camp is repeated each year with talented youth being encouraged to audition for "Illuminations" regular productions. In phase two, the theatrical classes become more advanced. Plays, awareness spots, access tapes for hearing theater and museums, and advertising videos are made and tested within the hearing loss community. The adults from the classes will "star" in the tapes and create a production for the community.

Products: In the last phase of the project, the advanced groups will take the "deaf-tested" videos to the hearing community for evaluation. Materials they develop and test will be disseminated within the community and nationally to demonstrate that there are cost-effective methods for providing accommodation to all people with hearing loss in all places at all times. Museums and theaters are the primary targets. Public television will air a play, written by a person with hearing loss. The participants (actors, directors, crew) will be people with hearing loss. Tape clips of activities that show OPTICA in action will be assembled and disseminated. A panel discussion about experiences in promoting access and cultural differences will be videotaped for public television.

Grant Number: H327T980011

Instant Theater Residencies

Project Director: Weir, Aaron; Thackaberry, Neil
Cleveland Signstage Theatre
8500 Euclid Ave.
Cleveland, OH 44106
216-229-2838

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The Cleveland Signstage Theatre (formerly Fairmount Theatre of the Deaf) will continue the "Instant Theater" Residency project by encouraging joint participation by individuals who are deaf and individuals who

are hearing, both youth and adults, in the production and presentation of theater performances in high schools and community theaters. The goals of this project include the creation of a cultural opportunity for students and adults, deaf and hearing, to produce live theatre performances under professional direction; and the enhancement of self- worth of mainstreamed deaf students who attend regular schools.

Method: These goals will be accomplished through a series of workshops, classes, rehearsals, and performances conducted during two, eight-week residencies by Cleveland Signstage Theatre. The target population is primarily deaf students attending regular high schools. A secondary target is deaf adults in the same communities that host the chosen community theaters. The project will provide a cultural opportunity for students who are frequently isolated from the general student population. The adults participating will have the opportunity to form new social contacts and to participate in an art form that has traditionally not been available to them. The results of the project will be an intense cultural experience for 120 students and 60 adults, and an opportunity for 1,200 students and 3,200 adults to see individuals who are deaf perform in local theater productions. The project also includes professional development for teachers, actors, and directors so that opportunities for deaf participation will continue after the project's completion.

Products: Documentation of the process will be both in writing and in video tape. A practical "how to" manual will be developed to assist other schools and community theaters in opening their operations to participation by individuals who are deaf. Private sector funds will be solicited for free distribution of documentation to other institutions and individuals; otherwise documentation will be made available for the cost of duplication and shipping.

Grant Number: H327T980015

A Comprehensive Program of Professional Sign Language Theatre Productions and Educational Outreach Workshop

Project Director: Waterstreet, Ed
Deaf West Theatre Co., Inc
5112 Lankershim Blvd.
North Hollywood, CA 91601
818-762-2998

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The purpose of this project is to preserve and expand a comprehensive program of cultural experiences for deaf and hard-of-hearing adults and children. The primary objective is to provide deaf and hard-of-hearing artists and audiences of all ages a cultural home—a place to discover their talent; cultivate their skills; develop self-esteem and cultural pride through role models, training, and employment; explore current issues; and perpetuate deaf culture.

Method: The project will produce a minimum of two professionally produced plays per year and provide theatre education and drama experiences, such as a series of three 12-week drama workshops, for children enrolled in target school programs in southern California. Crucial to the program is the cross-cultural melding of deaf and hearing worlds and the inclusion of members of ethnic and minority groups. The project's school partnerships will be a mechanism for outreach to parents and individuals interested in children's theatre.

Products: The primary products will be the professionally produced plays and the drama workshops.

Grant Number: H327T980019

Dreams to Sign

Project Director: Fogel, Bonnie; Yeh, Mary Gibbs
Bethesda Academy of Performing Arts Deaf Access Program
7300 Whittier Blvd.
Bethesda, MD 20817
301-320-2550

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The purpose of the Dreams to Sign project is to expand the six-year foundation laid by the Bethesda Academy of Performing Arts (BAPA) Deaf Access Program, which provides quality cultural experiences by and for integrated deaf, hard of hearing, and hearing teenage performing arts companies and by integrated companies of deaf and hearing adults.

Method: Dreams to Sign will accomplish this via the following activities: 1) upgrading the production values of BAPA's teen companies' productions so that the videos will reflect qualities appropriate for wider dissemination; 2) producing videos of the performances and a documentary of the rehearsal process through a partnership with Stage II Communications; 3) creating an original play to be performed by an integrated professional adult company that will travel to schools and community venues on a year-round basis building public awareness by showcasing the artistic and intellectual achievements of deaf individuals; 4) disseminating information to others in a position to emulate BAPA's work with the deaf community through a partnership with Cable TV Montgomery and Sprint/Maryland Relay; and 5) providing quantitative data on the growth of public awareness as a result of this initiative by designing evaluation tools to test public reaction in three settings through a partnership with NOVA Research Company.

Products: Dreams to Sign will collaborate with Woodbine Press, who will publish a book titled Dreams to Sign as a result of this initiative. A World Wide Web page will be created and maintained to provide a constant, updated source of information on all aspects of the program. Sprint/Maryland Relay will utilize the Dreams to Sign documentary and production videos at their presentations to businesses, agencies, nonprofit organizations, and medical and health-related organizations; and the project will be promoted through Sprint/Maryland Relay "Today" quarterly newsletters. Training workshops on deaf culture, American Sign Language, and Sprint/Maryland Relay projects will be conducted. Videos of the teen company productions will be cablecast on Cable TV Montgomery and/or Montgomery Community Television.

(84.327U)
Closed-Captioned Television

Grant Number: H327U990001

Closed Captioned Television Programs Syndicated Programs

*Project Director:*Idoni, Linda
WGBH Educational Foundation
The Caption Center
125 Western Avenue
Boston, MA 02134
818-562-3344
*Fax Number:*818-562-3388
*E-mail:*Linda_Idoni@wgbh.org

*Beginning Date:*10/01/99
*Ending Date:*9/30/02

*Purpose:*The Caption Center, a nonprofit service of the WGBH Educational Foundation, will closed caption approximately 339.5 hours annually of nationally syndicated classic, or "evergreen" television programming for the benefit of the nation's deaf and hard-of-hearing audience. This project will increase the availability of a wide range of closed captioned syndicated "evergreen" television programs which are enjoyed by individuals who are deaf or hard of hearing and their families. In addition to providing access to syndicated programs for this population, this project also makes it possible for individuals who can hear to enhance their literacy skills whether they are just learning to read, or are native speakers of other languages who are learning English as a second language.

Method: The Caption Center will produce captions in its Los Angeles facility, with additional staff and technical resources available at its Boston and New York facilities. All three offices are fully equipped and all personnel are in place so that The Caption Center can begin captioning programming at once. The caption-viewing audience will continue to communicate with this project via e-mail, letters, phone calls, TTY, and Internet bulletin boards.

Grant Number: H327U990002

Closed Captioned Television Programs
National News & Public Information ABC and CBS Networks

Project Director: Karlovits, Joseph
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317-9503
724-514-4000
Fax Number: 724-514-4111
E-mail: Joe-K@vitac.com

*Beginning Date:*10/01/99
Ending Date: 9/30/02

*Purpose:*VITAC will caption a variety of national news programs available to audiences on two broadcast-television networks: ABC and CBS.

Method: The objectives throughout the three years of the project are the following: 1) to continue the quality

the captioning of nationally televised programs which closely match preferences of the captioning audience; 3) to expand private sector support for captioned programming by using federal funds as an inducement to increase funding support from program producers; and 4) to continue to seek input from the deaf community through VITAC's Caption Viewers Advisory Panel, and to inform the deaf community about this project.

Products: The project will provide closed-captioned television programming which has become a part of the daily routine for millions of citizens who are deaf and hard-of-hearing. This programming will be the primary source of news, information, and entertainment for many people, and a cultural experience that hearing and non-hearing members of the same family can share on equal footing.

Grant Number: H327U990003

Closed Captioned Television Programs Children's Programs

Project Director: Karlovits, Joseph
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317-9503
724-514-4000
Fax Number: 724-514-4111
E-mail: Joe-K@vitac.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will provide deaf and hard-of-hearing Americans with access to hundreds of hours of nationally released TV series for children. VITAC's specific objectives are: 1) to assure the quality captioning of 220 hours of children's TV programs in Year One of the project; 2) to expand the captioning of nationally televised programs which closely match preferences of the captioning audience; 3) to expand private sector support for captioning programming by using federal funds as an inducement to increase funding support from program producers; and 4) to continue to seek input from the deaf community through VITAC's Caption Viewers Advisory Panel, and to inform the deaf community about this project.

Method: VITAC will caption a wide variety of first-run children's programs available to national TV audiences. From FOX Children's Network, programs such as "The Magic School Bus," "Life with Louie," and "Goosebumps," will be captioned. Additional programming will be captioned from The Program Exchange: Space Kidettes and King Leonardo.

Products: The children's programs captioned by this project are designed to entertain and educate. The ability of deaf students to compete will be increased because they will have access to the same powerful tools as their hearing counterparts.

Grant Number: H327U990004

Closed Captioned Television Programs -- Children's Programs

Project Director: Karlovits, Joseph R.
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317-9503
724-514-4000
Fax Number: 724-514-4111
E-mail: Joe-K@vitac.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: Through this project, and with support from four major distributors of children's programming, VITAC will caption new children's television programs and reformat repeat programs.

Method: Method: In the first year of the project, VITAC will caption over 170 hours of new children's television programs. VITAC's support from the four major distributors of programs will enable it to greatly increase the amount of programming that can be captioned. It will work to expand the captioning of nationally televised programs based on the preferences of the captioning audience and it will expand private-sector support for captioned programming. All of the programs will be captioned in "pop-on" style.

Products: In addition to providing thousands of hours of captioning for the children's programs, VITAC will inform the deaf community of its services via newsletters, press releases, a web site, and personal appearances by spokespersons.

Grant Number: H327U990005

Closed Captioned Television Programs -- Syndicated Television Programming

Project Director: Karlovits, Joseph R.
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317-9503
724-514-4000
Fax Number: 724-514-4111
E-mail: Joe-K@vitac.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will allow VITAC to caption a variety of "evergreen" classic programs available to audiences through syndication, providing access to this cultural experience and allowing both hearing and non-hearing individuals to experience it on equal footing.

Method: In the first year of the project, VITAC will caption over 350 hours of classic television programs. VITAC has obtained support from three major distributors of syndicated programs which will enable it to greatly increase the amount of programming that can be captioned. It will work to expand the captioning of nationally televised programs based on the preferences of the captioning audience and it will expand private-sector support for captioned programming. All of the programs will be captioned in "pop-on" style and will be done with sensitivity to non-dialogue concerns such as music, sound effects, and even silences; the overall goal will be for the non-hearing viewer to get the same information and emotional experience as the hearing viewer.

Products: In addition to providing hundreds of hours of captioning for the "evergreen" programs, VITAC will inform the deaf community of its services via newsletters, press releases, a web site, and personal appearances by spokespersons.

Grant Number: H327U990006

Closed Captioned Television Programs -- National News & Public Information: CNN Headline News

Project Director: Karlovits, Joseph R.
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317-9503
724-514-4000
Fax Number: 724-514-4111
E-mail: Joe-K@vitac.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: Through this project, VITAC will caption over 5,700 hours of CNN Headline News and continue to expand the captioning of nationally televised programming that closely matches the preferences of the captioning audience.

Method: In the first year of the project, VITAC will caption over 110 hours each week of CNN Headline News' round-the-clock news coverage available to cable television audiences. It will seek private support to ensure that the amount of captioned programming remains constant. All of the programs will be captioned in "pop-on" style.

Products: In addition to providing thousands of hours of captioning for Headline News programs, VITAC will inform the deaf community of its services via newsletters, press releases, a web site, and personal appearances.

Grant Number: H327U990007

Closed Captioned Television Programs -- National News and Public Information

Project Director: Karlovitz, Joseph R.
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317-9503
724-514-4000
Fax Number: 724-514-4111
E-mail: Joe-K@vitac.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: Through this project, VITAC will closed-caption the full variety of national news programs available to audiences on the NBC network.

Method: Each year, VITAC will caption over 1,600 hours of NBC news, special reports, and emergency coverage.

Products: This grant will meet the urgent daily needs of millions of American citizens who are deaf or hard of hearing to have access to televised news reporting. The project will continue to seek input from the deaf com-

munity about preferences, and it will inform the community of its services through its advisory panel, newsletters, a web site, and spokespersons.

Grant Number: H327U990008

Closed Captioned Television Programs -- Syndicated Television Programming

Project Director: Karlovitz, Joseph R.
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317-9503
724-514-4000
Fax Number: 724-514-4111
E-mail: Joe-K@vitac.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: Through this project, VITAC will caption a variety of "evergreen" classic television programs made available to audiences through syndication.

Method: In the first year of the project, VITAC will caption over 450 hours of classic television programs. It will work to expand the captioning of nationally televised programs based on the preferences of the captioning audience and it will expand private-sector support for captioned programming. All of the programs will be captioned in "pop-on" style.
Products: In addition to providing hundreds of hours of captioning for the "evergreen" programs, VITAC will inform the deaf community of its services via newsletters, press releases, a web site, and personal appearances by spokespersons.

Grant Number: H327U990009

Closed Captioned Television Progams -- Children's Programs

Project Director: Idoni, Linda
WGBH Educational Foundation
The Caption Center
125 Western Avenue
Boston, MA 01234
818-562-3344
Fax Number: 818-562-3388
E-mail: Linda_Idoni@wgbh.org

Beginning Date: 10/01/99
Ending Date: 9/30/01

Purpose: This project of The Caption Center will continue and expand the availability of closed-captioned children's programming. It will maintain quality standards and refine its captioning operation to ensure the accurate transmission of caption data for all major feeds, whether pre-recorded or automatic live-encoded.

Method: The project will caption 411 hours annually of the most popular children's programming. Programs currently captioned will continue without interruption and new programs will be selected on the basis of their popularity and availability. Partnerships will be established with producers of children's programming on broadcast and cable television.

Products: The life of the programs captioned through this project will be extended through "after market" caption data: subsequent broadcast, online services, and distribution through home video, CD-ROM, and DVD.

The project will also aggressively promote the benefit of captioned children's programs to the traditional deaf and hard-of-hearing audiences, as well as to new audiences, including children learning to read or struggling to learn English.

Grant Number: H327U990010

Closed Captioned Television Programs -- National News and Public Information

Project Director: Spellman, Jack
WGBH Educational Foundation
The Caption Center
125 Western Avenue
Boston, MA 02134
617-492-9225
Fax Number: 617-562-0590
E-mail: Jack_Spellman@wgbh.org

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: Through this project, The Caption Center will continue its mission of providing the widest possible access to television and video for deaf and hard-of-hearing people by captioning national newscasts, public information programming, and emergency programming on broadcast and cable networks, while maintaining or enhancing the quality of captioning on those programs.

Method: This project will allow The Caption Center to continue uninterrupted captioning coverage of news and public information programming on CBS, PBS, A&E, and Knowledge TV and to continue to set quality and service standards for audiences and the captioning industry. Through the project, over 1800 hours of news programming and emergency coverage each year will be captioned.

Products: During the project, in addition to the captioned programming, The Caption Center will provide various outreach activities to promote the availability of captioned news and public information programs and to build awareness of service and the availability of The Caption Center's resources.

Grant Number: H327U990013

Closed Captioned News and Public Information - Two

Project Director: Orphan, David
National Captioning Institute, Inc.
1900 Gallows Road Suite 3000
Vienna, VA 22182-3865
703-917-7600
Fax Number: 703-917-9878
E-mail: orphan@ncicap.org

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: The National Captioning Institute (NCI), in collaboration with three major television news networks, will close-caption a selection of national news and public information programs over a three-year period, increasing the availability of closed-captioned national news and public information programs.

Method: The project will select a mix of news and public information programs for captioning that meets the

diverse cultural and educational interests of deaf and hard-of-hearing consumers by identifying their needs and establishing close working partnerships with broadcasters. Fifty percent of the costs of captioning these shows will be shared by the collaborating producers and networks, showing their commitment to making television accessible to people who are deaf or hard of hearing. Captioning will be done using real-time and live-display technologies.

Products: As a result of this project, a wide range of news and public information programs will be made accessible to people who are deaf or hard of hearing. The applications of captioned TV and videos will extend beyond the deaf community to other populations: young children learning to read, remedial readers, children and adults with learning disabilities, illiterate adults, and those learning English as a second language.

Grant Number: H327U990014

Closed Captioned Children's Television - Two

Project Director: Thomas, Yvonne; Orphan, David
National Captioning Institute, Inc.
1900 Gallows Road, Suite 3000
Vienna, VA 22182-9878
703-917-7600
Fax Number: 703-917-9878
E-mail: orhpan@ncicap.org

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: The National Captioning Institute (NCI), in collaboration with five major producers and broadcasters of children's television programs, will close-caption a variety of children's programs to increase the availability of closed captioned programming for children who are deaf and hard of hearing and their families.

Method: NCI has combined children's television programs from five major networks and companies to create a mix of captioned shows that is intended to meet the diverse educational, cultural, and entertainment interests of children who are deaf and hard of hearing. The shows will include various "Cable in the Classroom" programs as well as cartoons and other original programs. Costs of captioning these shows will be shared by the collaborating producers and networks, evidence of their commitment to making television shows more accessible to children.

Products: Each year of the project, over 500 hours of children's programming will be captioned. The availability of captioned children's programs that will result from this project will add to the resources available to support the application of captioned TV in reading and literacy education.

Grant Number: H327U990016

Closed Captioned News and Information - One

Project Director: Okrand, Marc; Orphan, David
National Captioning Institute, Inc.
1900 Gallows Road, Suite 3000
Vienna, VA 22182-3865
703-917-7600
Fax Number: 703-917-9878
E-mail: orphan@ncicap.org

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: The National Captioning Institute (NCI), in collaboration with a variety of television news producers and broadcasters, will close caption national news and public information programs over a three-year period, increasing the availability of closed-captioned national news and public information programs.

Method: The project will select a mix of news and public information programs for captioning that meets the diverse cultural and educational interests of deaf and hard-of-hearing consumers by identifying their needs and establishing close working partnerships with broadcasters. The costs of captioning these shows will be shared by the collaborating producers and networks, showing their commitment to making television accessible to people who are deaf or hard of hearing. Captioning will be done using real-time and live-display technologies.

Products: As a result of this project, a wide range of news and public information programs will be made accessible to people who are deaf or hard of hearing. The applications of captioned TV and videos will extend beyond the deaf community to other populations: young children learning to read, remedial readers, children and adults with learning disabilities, illiterate adults, and those learning English as a second language. All told, about 100 million Americans can benefit from captioned television.

Grant Number: H327U990017

Closed Captioned Syndicated Television

Project Director: Helminiak, Jeff; Orphan, David
National Captioning Institute, Inc.
1900 Gallows Road, Suite 3000
Vienna, VA 22182-3865
703-917-7600
Fax Number: 703-917-9878
E-mail: orphan@ncicap.org

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: The National Captioning Institute (NCI), in collaboration with seven major television producers and broadcasters, will complete close-captioning of more than 831 hours of syndicated off-network or "evergreen" television programs over the three-year period of the grant.

Method: NCI has combined programs from the various networks and companies to create a mix of captioned shows that is intended to meet the diverse cultural and entertainment interests of viewers. As a result of this project, a wide range of off-network and popular previously broadcast programs or series with long shelf lives will be made accessible to people who are deaf or hard of hearing. To deliver cost-effective captioning services, NCI will use prerecorded production methods and establish funding partnerships with broadcasters to share the cost of captioning to make television accessible to people who are deaf or hard of hearing.

Products: This project will increase the availability of syndicated television programs for people who are deaf or hard of hearing. Approximately 217 hours of syndicated programming will be captioned each year of the project.

Grant Number: H327U990018

Closed Captioned Children's Television - One

Project Director: Thomas, Yvonne; Orphan, David
National Captioning Institute, Inc.
1900 Gallows Road, Suite 3000
Vienna, VA 22182-3865
703-917-7600
Fax Number: 703-917-9878
E-mail: orphan@ncicap.org

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: The National Captioning Institute (NCI), in collaboration with six major producers and broadcasters of children's television programs, will caption a variety of children's programs.

Method: NCI will work with various companies producing television programs for children to create a mix of captioned shows intended to meet the diverse educational, cultural, and entertainment interests of children. The programs to be made accessible to children who are deaf or hard of hearing range from classic children's shows to serial favorites and cartoons.

Products: This project will increase the availability of closed-captioned programming for children who are deaf or hard of hearing. These captioned children's programs will add to the programs available to support the application of captioned TV in reading and literacy education.

Grant Number: H327U990019

Closed Captioning of Children's Programs

Project Director: Duckler, Max
CaptionMax, Inc.
530 N. 3rd Street
Minneapolis, MN 55401-1252
612-341-3566
Fax Number: 612-341-2345
E-mail: max@captionmax.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: CaptionMax, Inc. will provide quality off-line "pop-on" style captioning for popular children's programs shown on commercial and public broadcast and cable networks, so that children who are deaf or hard of hearing will have access to these programs.

Method: The project will caption two popular and non-commercial programs on The Learning Channel, aimed at children ages 4-8. The aim is to allow the children to gain the ability to read the captions along with following the action on the screen to reinforce the development of their language skills. Closed-captioning will be provided for 92 commercial-free, half-hour programs each year, enabling programs in The Learning Channel's "Ready, Set, Learn" time block to be accessible to deaf and hard-of-hearing children and their families.

Products: Closed captioning of the two shows will make them available to an additional 8 million deaf and hard of hearing individuals and 9.6 million viewers who use English as a second language. To make sure that the target audience is reached, Discovery Communications, its existing advertising/promotional department, and CaptionMax will market the programs captioned through this project.

Grant Number: H327U990020

Closed Captioning of Syndicated Television Programming

Project Director: Duckler, Max
CaptionMax, Inc.
530 N. 3rd Street
Minneapolis, MN 55401-1252
612-341-3566
Fax Number: 612-341-2345
E-mail: max@captionmax.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: CaptionMax, Inc., will provide quality off-line, "pop-on" style captioning for popular previously broadcast syndicated television programming.

Method: Working with The Arts and Entertainment Network, CaptionMax will caption 150 hour-long episodes of television programs enjoying lasting popularity.

Products: By captioning these syndicated television programs, this project will make a variety of never-before captioned programs accessible to the large deaf and hard-of-hearing population, which will enable them to directly experience an important part of community life. In addition, by close-captioning these programs, the 30 million Americans for whom English is a second language can use this as a means of improving their language skills, while also benefitting from the subject matter offered.

Grant Number: H327U990022

Closed Captioned National News Programming

Project Director: Ferrier, Patricia
Media Captioning Services
2141 Palomar Airport Road, Suite 310
Carlsbad, CA 92009-1426
760-431-2882
Fax Number: 760-431-8735
E-mail: mediacap4@earthlink.net

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: Media Captioning Services will provide stenographic realtime and live-display captioning services on CNN's national news programming.

Method: Each year of the project, 520 hours of CNN's national news programming will be captioned, including in-depth news coverage, live breaking news, and specialized daily reports on business, finance, medicine, and science.

Products: Through this project, deaf and hard-of-hearing viewers will be able to keep well-informed via CNN's programming throughout the critical time periods of 5-6 and 10-11 in the evening.

Contracts

Grant Number: ED98CO0031

Advanced Prediction Methods for Augmentative Communication

Project Director: Lesher, Gregory W.
Enkidu Research, Inc.
24 Howard Ave.
Lockport, NY 14094
716-433-0608

Purpose: A core component of augmentative communication systems is dynamic word prediction, in which a list of probable words is presented for immediate user selection. This project will provide insight into new machine-prediction techniques.

Method: In Phase I, Enkidu Research investigated techniques for exploiting statistical relations between language elements to generate context-dependent prediction lists, reducing user keystrokes by 56.8 percent. Candidate topics for continued research were identified during this effort. By quantifying human prediction strategies, an empirical study will provide insight into new machine-prediction techniques. Since the size of the corpus used to derive statistical relations is of critical importance, a system for the rapid generation of structured corpora will be developed using autonomous agents and innovative text classification schemes. An algorithm for the automatic optimization of component interpolation will be developed, allowing for detailed research into context-dependent prediction strategies and other more sophisticated statistical models. To provide further performance gains, controlled research into advanced prediction techniques will continue in areas such as word recency, real-time model updates, and class caching.

Products: The culmination of Phase II effort will be a set of laboratory-tested statistical prediction techniques and auxiliary software tools for the collection of training corpora, assessment of human prediction performance, and optimization of predictive components. Embedded within Enkidu Research's flexible IMPACT augmentative software, the advanced prediction techniques will provide performance under a wide range of augmentative configurations.

Grant Number: ED98CO0032

Screen Reader Architecture Math System (SRAMS)

Project Director: Morford, Ronald A.
Automated Functions, Inc.
7700 Leesburg Pike, Suite 420
Falls Church, VA 22043
703-883-9797

Purpose: The objective of the Screen Reader Architecture Math System (SRAMS) is to design, develop, and test a computer-based system which uses successful screen-reading architecture to enable students with visual

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impairments to independently manipulate math expressions to solve math problems. This system will provide the means for thousands of visually impaired students to succeed in higher math and therefore be qualified to fill an ever-increasing number of technical job and educational positions.

Method: The rules of mathematics will be analyzed and combined with screen-reading navigational logic to create a specialized system to assist the student in interacting with math expressions and problems. SRAMS will provide tools that make it easier for the student to succeed in such higher math classes as Algebra I, Algebra II, Trigonometry, and Calculus.

Products: The Screen Reader Architecture Math System will enable visually impaired students to independently and efficiently manipulate math expressions in order to solve math problems. The system will run on portable and desktop computers using the Windows 95 operating system.

Grant Number: ED98CO0035

The Adaptive Device Locator System on the World Wide Web

Project Director: Lacefield, Warren E.; Ellis, Penny D.
Academic Software, Inc.
331 West Second St.
Lexington, KY 40507
606-233-2332

Purpose: The Adaptive Device Locator System is a full-spectrum national adaptive technology database. It features a sophisticated but intuitive device classification system based on human development and user goals and purposes. The ADLS-on-the-Web project will make this resource accessible to teachers, professionals, and consumers with disabilities by transforming the entire Locator System content and code into a state-of-the-art, multilevel and multimedia, worldwide website on the Internet.

Method: Phase I demonstrated scientific and technical feasibility through loading of two databases (Communication and Environmental Adaptation) as web resources. Phase II will involve installation of the remaining five databases, explore innovative information presentation modes, and promote ADLS-on-the-Web.

Products: ADLS-on-the-Web will serve the needs of health professionals, teachers, and human resource personnel. Vendor links will allow visitors to jump directly to other commercial sites once appropriate assistive technology devices are located. ADLS will focus international attention on American companies specializing in adaptive technology and promoting international trade in this field. ADLS-on-the-Web will feature monthly infomercials, new product announcements, expanded vendor product listings, and other information of interest to consumers.

Grant Number: ED98CO0039

An American Sign Language Picture Dictionary/Storyboard for Young Children on CD-ROM

Project Director: Jensema, Corinne K.
Institute for Disabilities Research and Training, Inc.
2424 University Boulevard, West
Silver Spring, MD 20902
301-942-4326

Purpose: This Phase II project will create storyboards for young deaf children on a set of CD-ROMs or a DVD-ROM. This program will assist children in associating concepts and stories about their community with written and spoken English words and American Sign Language (ASL) signs.

Method: The CD-ROM proposed will depict a community street. Children will be able to click on a building (e.g., library, school) or area (e.g., construction site, playground) and get a story about that site and the people who work there. Each of the 15 stories will be approximately 10 "pages" in length and have animation. Children will have the option of seeing (in ASL videoclips) and/or hearing the story and targeted vocabulary. Signers of the stories will be multiethnic and reflect a character in the story. Three instructional activities included with each story will provide reinforcement and development of skills in concept formation, computer use, visual perception, English vocabulary and structure, and ASL vocabulary and structure. An accompanying guide will explain related developmental and educational information to parents and teachers.

Products: Phase II of this project will result in a set of CD-ROMs or a DVD-ROM that will provide young deaf children with 15 stories in both English and ASL. The 45 activities that accompany the stories will be totally accessible without needing hearing and will reinforce skills needed developmentally by children of that age. The CD-ROM set will be marketed either through a publishing house that handles deafness-related products and/or through IDRT's website and advertising activities.

Grant Number: ED98CO0040

Interactive Multimedia to Facilitate Employment of Adolescents and Young Adults with Disabilities

Project Director: Avent, R. Richard
American Research Corporation of Virginia
P.O. Box 3406
Radford, VA 24143-3406
540-731-0655

Purpose: This Phase II project will develop and evaluate a CD-ROM-based interactive multimedia program for training in school-to-work transitioning for adolescents with disabilities in grades 11-12 and unemployed young adults with disabilities who have been out of school for no more than two years.

Method. Phase II technical objectives include development of the instructional content and scripts for video portions of the program, production of video portions of the program, integration of the content and video with multimedia presentation technology, and evaluation of the Phase II program with regard to usability and changes in knowledge and employment outcomes. Phase II instructional modules will be organized on the basis of

disability type and will include physical disabilities, learning disabilities, hearing impairment, visual impairment, emotional and behavioral disabilities, chronic illness, and speech disorders.

Products: The CD-ROM-based interactive multimedia program will be marketed to both schools and homes.

Grant Number: ED98CO0041

Conversion of Score Files to Music Braille

Project Director: McCann, William R.
Dancing Dots Braille Music Technology, L.P.
130 Hampden Road, Third Floor
Upper Darby, PA 19082-3110
610-352-7607

Purpose: Commercial music publishers have growing archives of Score files used to produce print editions. This Phase II project will develop an automated way to interpret these Score files to produce equivalent Braille editions.

Method: Dancing Dots, developers of the GOODFEEL Braille Music Translator, will complete a comprehensive file reader for Score music notation files based on the advanced prototype developed under Phase I. GOODFEEL can already transcribe MIDI, Lime Notation, and NIFF files. It will be enhanced to accommodate the more varied set of musical symbols contained in Score files. A scanning feature for Score will be integrated into the translator. The project will also bring GOODFEEL into full compliance with the new international standards for Braille music. Support will be added for alternative Braille music formats such as short-form scoring and popular music leadsheets. Support for literary variations of foreign languages will be integrated into GOODFEEL.

Products: For the first time, publishers will be able to release the print and Braille editions of new works simultaneously. Blind users of Score will be able to print their work with Score and make a companion Braille edition with GOODFEEL.

Grant Number: ED98CO0045

Signing Avatars

Project Director: Sims, Edward M.
Seamless Solutions, Inc.
3504 Lake Lynda Dr., Suite 390
Orlando, FL 32817
407-737-7309

Purpose: This Phase II project will provide opportunities for Deaf Americans to interact with computers and to communicate over Long-distance communications systems through the use of computer-generated, virtual reality sign-language representations of the signer's face, arms, and hands, called "avatars."

Method: Phase I demonstrated the possibility of using computer-generated, virtual reality representations of the signer's face, arms, and hands to enable interactive sign-language communication via standard phone lines and personal computers. This technology not only provides lower cost, long-distance sign-language communication but also a more natural and rapid interaction between humans and computer applications. Phase II will involve

automating transitions between signs (including facial expressions) and expanding the Signing Avatars vocabulary to at least 500 concepts, while improving the representation of facial expressions and joint motions.

Products: The automated, enhanced, and expanded sign language animations will be used to demonstrate fully functional prototype applications, including: 1) an on-line signing dictionary; 2) a sample sign-language lesson; and 3) Internet communication. Commercialization of Signing Avatars is being pursued for the above three prototype applications.

Grant Number: ED98CO0046

Trails Web Site with Universal Access Information

Project Director: Axelson, Peter W.; Chesney, Denise A.
Beneficial Designs, Inc.
5858 Empire Grade
Santa Cruz, CA 95060
408-429-8447

Purpose: This Phase II project will offer an easy means for individuals with disabilities to obtain information about the accessibility of trails in outdoor parks and recreational areas. This project will develop a Trails Web site that provides universal access information for trails throughout the U.S. This will be useful to all hikers, regardless of their ability.

Method: The Universal Trail Assessment Process enables trail managers to objectively assess specific trails with regard to grade, cross slope, width, surface characteristics, and obstacles. The collected trail data is processed to create Trail Access Information in a format similar to a Nutrition Facts food label. Phase II will establish a standardized set of trail characteristics, develop the Web site and trail access information database, collect and enter trail information, and demonstrate the effectiveness of the Web site through on-line evaluations. The Web site will allow users to search for trails that meet their specific access needs. The site will also contain links to other Web sites with related information.

Products: Providing objective information on the degree of accessibility of outdoor trails through the World Wide Web will give millions of people with mobility limitations a tool to facilitate access to the outdoor leisure and recreation environment.

Grant Number: ED98CO0051

Promoting Student Self-Determination: A Student-Directed Multimedia Transition Planning and Learning Package

Project Director: Burk, Martha
A.U. Software, Incorporated
1735 S Street, N.W.
Washington, DC 20009
202-265-6443

Purpose: This Phase II project will produce an interactive, multimedia CD-ROM-based version of "Whose Future Is It Anyway: A Student-Directed Transition Planning Process," currently published in workbook form.

Method: Phase I established the feasibility and technical merit of a CD-ROM based transition-planning program for students with mental retardation and learning disabilities. Project foundations are innovative self-determination transition planning materials developed and validated by The Arc, and computer-based presentation

methods developed and field-tested by A.U. Software for assessment of students with disabilities. In addition to providing a truly innovative self-determination tool for students to use in transition planning, it will provide computer experience in a non-threatening environment.

Products: Phase II will result in a new, more efficient, and cost-beneficial transition planning program that significantly enhances self-determination for students with disabilities.

Grant Number: ED98CO0055

Broadcast Radio for Individuals Who are Deaf Gaining Equity (BRIDGE)

Project Director: Blackshear, Leonard A.
TeleSonic Division Associated Enterprises, Inc. (AEI)
31 Old Solomons Island Road
Annapolis, MD 21041
410-841-6920

Purpose: In Phase II of project BRIDGE (Broadcast Radio for Individuals Who are Deaf: Gaining Equity), TeleSonic proposes to simultaneously broadcast information via the radio in multiple transmission forms to deliver both audio and visual information. Users of TTYs, for example, will receive "closed-captioned" broadcasts of radio programs. The goal will be to develop working models of the radio transmitter and receiver devices, and to measure the merit and value of the models.

Method: In Phase I, TeleSonic proved it is feasible to transmit multimedia signals over commercial radio to be received by special decoder devices. Phase II research and development tasks will include: conducting ongoing technical research; examining future directions in radio broadcasting; finalizing synchronization schemes; updating system specifications; developing models; conducting tests with radio stations; identifying future modes of sustaining further development; and reporting results.

Products: Anticipated results and implications of the proposed research and development effort include: 1) the sale of a commercially available transmitter device to radio stations; 2) the sale of an add-on chip/module for attachment to consumer receiving devices, such as TTYs and computers, to serve as a decoder; 3) the sale of a decoder device to radio manufacturers; and 4) the distribution of specially formatted prerecorded multi-transmission radio programs to radio broadcast stations.

Grant Number:ED99CO0116

Automated PC-Based Speech to Sign Language Interpreter

Project Director: Sims, Edward
Seamless Solutions, Inc.
2504 Lake Lynda Drive, Suite 390
Orlando, FL 32817
407-737-7309

Purpose: This project will integrate speech recognition and natural language processing software with Seamless Solutions, Inc.'s PC-based Signing Avatars three-dimensional character animations of sign-language communication, to provide a prototype PC-based speech-to-sign-language and text-to-sign-language interpreter.

Method: The key new development for this Phase II project will be the addition of natural language processing (NLP), using a sign lexicon and translation rules that analyze input English sentences to provide not only correct translation of each sign, but also correct and realistic facial expression, timing, and emphasis. The result will be the synthesis of high-quality, realistic sign-language translation of spoken or textual English-language input. The completed prototype Speech to Sign Language Interpreter will be evaluated in two applications: 1) as a tool for partially automating the process of adding sign language animations to video and multimedia educational materials, and 2) as a real-time, automated interpreter for the Deaf.

Products: The prototype Speech to Sign Language Interpreter will demonstrate a cost-effective alternative for providing accessibility to video and multimedia for deaf individuals who use sign as a first language. It will allow signed content to be authored and added to existing media at least as readily as closed captioning is added now. As speech recognition and NLP technology progress, the Speech to Sign Language Interpreter will provide a direct, real-time means for communication between the hearing and the Deaf.

Grant Number:ED99CO0117

A Computer Program to Emulate TTY Communication

Project Director: Jensema, Carl
Institute for Disabilities Research and Training, Inc.
2424 University Blvd., West
Silver Spring, MD 20902
301-942-4326

Purpose: This Phase II project will produce a marketable Baudot TTY program for personal computers and develop a programmer's tool kit for adding Baudot communication to other programs. The project is based on a Phase I demonstration that found that it is possible to emulate TTY communication on a personal computer using software alone.

Method: Rather than generating tones using special hardware, the tones for each Baudot character used by deaf people in telephone transmissions can be stored in audio waveform files and transmitted as needed. Similarly, incoming tones can be recorded into a computer and analyzed mathematically to identify the Baudot characters received. A personal computer with this software will be able to communicate with the Baudot TTY equipment currently used by the Deaf community.

Products: Phase II will develop a comprehensive telephone communication program for personal computers and a programmer's tool kit for adding TTY capabilities to other communication programs. The products to be developed could provide a very economical way for businesses and government agencies to meet Americans with Disabilities Act requirements for telecommunications access for people who are deaf.

Grant Number:ED99CO0118

Web Trek: A Specialized Web Browser Providing Independent Access to the Internet to Individuals with Mental Retardation

Project Director: Davies, Daniel
AbleLink Technologies
2850 Serendipity Circle West, Suite 202
Colorado Springs, CO 80917
719-572-1517

Purpose: This project will further develop Web Trek, an interactive web browser designed specifically to enhance access to the Internet for individuals with mental retardation and other cognitive disabilities.

Method: Phase I demonstrated the technical merit and feasibility of developing a specialized web browser that facilitates significantly more independent access to the Internet for individuals with mental retardation as compared to mainstream web browsers. The Phase II project will build on the successful results of Phase I to: complete the Web Trek web browser program; build a web-based visual search engine for searching the Internet; build an integrated e-mail application that can be used by individuals with mental retardation; and perform expanded field testing of the browser, picture-based search engine, and the e-mail components to assess their effectiveness for individuals with varying levels of cognitive disability.

Products: Phase II will result in a fully functioning system that is ready for commercialization in Phase III. The Web Trek system will open the door to the vast information, entertainment, and communication resources that are available via the Internet for millions of individuals with mental retardation and other cognitive disabilities. This research will result in a suite of tools that will provide non-text-based formats for searching the Internet; saving and retrieving favorite sites; comprehending Web content; and composing, sending, and receiving e-mail. The potential market includes families and individuals with mental retardation and other cognitive disabilities, all elementary and secondary schools, transition programs, adult services agencies, and vocational rehabilitation providers.

Grant Number:ED99CO0124

Visual Assistant: A Portable Multimedia Training System for Community-Based Skill Development for Individuals with Mental Retardation

Project Director: Davies, Daniel
AbleLink Technologies
2850 Serendipity Circle West, Suite 202
Colorado Springs, CO 80917
719-572-1517

Purpose: Computer technology offers promising new approaches to reducing dependence on others for individuals with mental retardation. This Phase II project will build on the successful results of Phase I to: complete Visual Assistant, a Windows CE-based multimedia trainer for training specific community integration skills of individuals with mental retardation; build a companion software application for the PC that helps manage the set-up of the Visual Assistant training tasks; and perform expanded field testing of the system to evaluate its applicability for a wide range of activities of daily living and levels of disability.

Method: Activities that have been too difficult without assistance from a caregiver or counselor can be programmed into the portable Visual Assistant system to help the individual perform the task independently. During Phase I the system requirements were identified and a "proof-of-concept" prototype of the Visual Assistant system was developed and tested. The results of the pilot study demonstrated strong support for using a multimedia training program on a handheld PC to enhance independence for adults with mental retardation in performing community-based vocational tasks. Use of the Visual Assistant prototype resulted in improved task accuracy and increased independence when compared to a traditional training approach for subjects that were trained on two community-based vocational tasks.

Products: Phase II will result in a commercial software application, Visual Assistant, that will be available for a wide variety of portable PC's running the Windows CE operating system. By capitalizing on commercially produced portable PCs, future Visual Assistant users will be able to choose from multiple supported living and training products that will be developed by AbleLink and other rehabilitation technology companies. Given the large number of individuals with mental retardation, as well as other disability populations that have a similar need for reminder tools and task assistance (e.g., individuals with brain injury, Alzheimer's, and elderly individuals), the commercial potential for Visual Assistant is substantial.

Grant Number:ED99CO0125

Strategies for Test Success: A CD-ROM for Students with Learning Disabilities

Project Director: Meltzer, Lynn
Institute for Learning and Development
3 Courthouse Lane
Chelmsford, MA 01824
781-861-3711

Purpose: This project will develop a CD-ROM with web access that will allow students to learn and practice test-taking strategies within a motivating, multi-dimensional, structured format. Students will work with computer-based notecards, graphic organizers, and multisensory strategies to help them to study more effectively. Although this software targets students with learning disabilities and attention deficit disorders, these strategies are beneficial for most students.

Method: Phase I of the project developed a novel instructional program to teach test-preparation and test-taking strategies, the Strategies for Test Success (STRATS) program. These strategies were successfully taught to middle-school students who subsequently improved in the study strategies that they used before taking tests and in their ability to analyze test questions systematically during the test-taking process. The design of a CD-ROM prototype revealed the many benefits of a computerized format for individualizing and optimizing test-taking instruction. Phase II will expand the diagnostic portion of the program, refine the STRATS test-taking strategies, and convert the strategy lessons to a hybrid CD-ROM with web access.

Products: The primary markets for this test-taking software include schools, homes, and professional practices. Dissemination and advertising will be expedited through an international publisher. Dissemination will also occur through many parent and professional conferences and numerous in-service teacher training courses.

Grant Number:HS96013001

Institute to Improve the Quality of Technology, Educational Media, and Materials for Individuals with Disabilities

Project Director: Carnine, Douglas
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National Center to Improve the Tools of Educators
Institute for the Development of Educational Achievement
5219 University of Oregon
Eugene, OR 97403-5219
541-346-5131
Fax Number: 541-683-7543

Beginning Date: 9/30/96
Ending Date: 9/29/01

Purpose: To apply national leadership and achieve widespread, long- term, and systemic changes that will improve the quality and effectiveness of technology, educational media, and materials (TMM) for individuals with disabilities. To encourage the appropriate development of TMM and inform decision makers about the acquisition and use of TMM to enhance outcomes for students with disabilities.

Method: The Institute will build a network of partnerships to support quality TMM and their appropriate use, create an infrastructure for developing and using quality TMM, and implement the infrastructure to build capacity for developing and using quality TMM. These goals will be realized through partnerships with governmental groups, the education profession, and external groups. The Institute will use a social marketing approach to recruit new partners and to educate the public and decision makers. Additional approaches will include introducing incentives for development and use of TMM; influencing revisions in the adoption process; and increasing capacity regarding TMM for publishers, end users, and researchers.

Products: Products will include: (1) prototype content standards prepared for California; (2) a research review of experimental studies of pedagogy in mathematics and reading; (3) procedures for consolidating, refining, and field-testing a model for identifying quality TMM and its appropriate use; and (4) procedures for consolidating, refining, and field-testing a model for identifying replicable high performing schools that appropriately use an array of quality TMM. Other products will be developed in conjunction with NCITE partners.

Grant Number:HS97022001

Center to Link Local School Districts with Information and Support on the Use of Technology, Educational Media, and Materials

Project Director: Zorfass, Judith
Education Development Center, Inc.
55 Chapel Street
Newton, MA 02158-1060

Beginning Date: 9/30/97
Ending Date: 9/29/02

Purpose: The goal of the Center to Link Local School Districts with Information and Support on the Use of Technology, Educational Media, and Materials (TMM) is to connect urban schools districts to available and relevant information and support on the effective use of TMM to: identify their needs and formulate plans based on those needs; access information and support in a coherent way that is closely aligned to those needs and plans; and develop the capacity to monitor, document, and evaluate the outcomes.

Method: The Center will first identify and assemble all of the entities that can provide relevant information and support to the school districts: a community-based resource group, a national resource bank of experts, and Dept. of Education-supported projects that provide training, technical assistance, materials, and resources. Second, the Center will create mechanisms and processes that identify the information and coordination with the needs of the sites.

Products: Center staff will: help design tools and procedures to carry out needs assessments and guide urban districts in forming action plans; utilize effective strategies to identify available and relevant information and support; create new information and support opportunities when needed; facilitate the development of a comprehensive plan to ensure that each district has access to necessary information and support, either within its district or in cross-district venues; create a blueprint to document all information and support activities, describe their impact, and share lessons learned with the wider field; guide districts to monitor and evaluate their own work and the work of the Center.

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